ZooKeys 1272: 67–136 (2026)
DOI: 10.3897/zookeys.1272.179156

Checklist

An updated checklist of mosquitoes (Diptera, Culicidae) of Ecuador: new records and public health significance

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Abstract

Mosquitoes are major vectors of human and animal diseases, making their accurate identification essential for vector surveillance and control. However, morphological identification has often been challenging, requiring taxonomic expertise and well-preserved specimens. Molecular markers, particularly DNA barcoding, offer an effective alternative for identifying both adult and immature stages. Ecuador is one of the most biodiverse countries in the world, a diversity that is also evident in its Culicidae fauna. This study provides a comprehensive revision of Ecuadorian mosquitoes, updating the national checklist and emphasizing species of public health importance. For species identification, an integrative approach was used combining morphology and DNA barcoding (COI and ITS2 regions). We list 266 species in 22 genera, of which 17 species are new national records, and 33 species are validated through molecular analysis. The updated checklist highlights Ecuador's Culicidae diversity across its biogeographic regions, which represent 7% of the world's mosquito diversity. These findings provide a critical foundation for future entomological research and vector control in the country.

Key words: Culicidae, diseases, diversity, DNA barcoding, taxonomy, vector-borne

OPEN ACCESS

Academic editor: John Soghigian
Received: 21 November 2025
Accepted: 28 January 2026
Published: 5 March 2026

ZooBank: https://zoobank.org/A6B89CA2-F331-4567-A40C-E02BF216378B

Citation: Ponce P, Cevallos V, Carrazco-Montalvo A, Gallardo-Cóndor J, Arévalo V, Galarza X, Coloma J (2026) An updated checklist of mosquitoes (Diptera, Culicidae) of Ecuador: new records and public health significance. ZooKeys 1272: 67–136. https://doi.org/10.3897/zookeys.1272.179156

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Introduction

The family Culicidae is one of the most widely distributed families in tropical and subtropical regions worldwide. It exhibits significant taxonomic diversity, encompassing two subfamilies, Anophelinae and Culicinae, with 112 genera and a total of 3,718 species officially recognized as of May 2025 (Beebe 2018; Harbach 2025). Mosquitoes are important vectors of animal and human diseases, with significant economic and public health implications (Nebbak et al. 2022). Their vast ability to transmit infectious and potentially deadly pathogens and parasites makes them the most significant blood-feeding arthropods globally (Jawień et al. 2024). Consequently,

entomological and epidemiological monitoring is required to guide vector control strategies aimed at preventing and reducing the disease burden (Mojica et al. 2025). However, effective mosquito control depends on understanding species-specific biological traits, making accurate identification essential for managing vector-borne diseases (Ashfaq et al. 2014).

Mosquito classification based on adult and larval morphological characteristics is time-consuming and requires extensive taxonomic knowledge (Taira et al. 2012; Hernández-Triana et al. 2019). Taxonomic keys are intricate and present various limitations, while the reliability of morphological identification depends on maintaining sample integrity, which is not always achievable in field settings (Telles-de-Deus et al. 2024). Consequently, complementary tools for species morphological identification, based on molecular markers—short DNA sequences commonly located in mitochondrial and ribosomal genomes—provide a valuable alternative for classifying both adult and immature mosquito stages (Chakraborty et al. 2021).

Various molecular markers such as Cytochrome c oxidase subunit 1 (COI), Cytochrome b (Cytb), NADH dehydrogenase subunit 4 (ND4), and internal transcribed spacer 2 (ITS2), have been employed in mosquito barcoding studies (Hebert et al. 2003; Yao et al. 2010; Bourke et al. 2013; Foster et al. 2013). However, the COI DNA barcode region is considered a universal marker for identifying animal species and remains a key tool for assessing the genetic diversity and structure of mosquitoes (Diptera: Culicidae) (Laurito et al. 2013, 2022; Kirchgatter et al. 2020).

Ecuador is located on the northwest coast of South America and comprises both the continental mainland and the Galápagos Islands. The continental territory has the coastal Pacific lowlands, the Andean highlands, and the Amazonian lowlands, resulting in 26 Holdridge ecological life zones, among the highest in the Neotropics (Holdridge et al. 1971; Cañadas 1983). This remarkable geographical diversity has made Ecuador one of the world's most biodiverse countries, a richness also reflected in the Culicidae family. Despite its long-standing status as a hotspot for mosquito-borne diseases, research on this group has been largely neglected for the past 50 years (Sippy et al. 2020). As a result, limited studies have left gaps in our understanding of mosquito diversity and disease dynamics. Meanwhile, vector mosquitoes continue to expand their global distribution, further increasing the risk of human and animal diseases (Tatem et al. 2012; Mier-y-Teran-Romero et al. 2017).

The most recent comprehensive checklist documented 179 species in Ecuador (Linton et al. 2013) predominantly within the genera *Anopheles*, *Aedes*, and *Culex*, which include taxa of medical significance and several species endemic to the country. This study updates the national inventory of mosquito species of Ecuador—emphasizing key pathogen vectors — through an integrative taxonomy approach. Morphological identification utilized taxonomic keys, original descriptions, and revisions, complemented by DNA barcoding (COI and ITS2 regions) for 33 species from 91 specimens. Historical records from scientific literature, catalogs, databases, and collections were systematically reviewed, resulting in 266 species across 22 genera, including 17 new national records.

Materials and methods

Adult mosquitoes were collected using a variety of sampling methods—including CDC traps, BG-Sentinel traps, motor-driven aspiration, manual aspiration (adults), manual collection (immatures), human/animal bait, rotary traps, and resting traps—between 2009 and 2025. Sampling was conducted under standardized entomological protocols established for each investigation project, ensuring comparability across sites and years. These efforts covered diverse natural habitats in Ecuador's Coastal, Andean, Amazon, and Insular regions, encompassing both undisturbed and anthropized areas.

The mosquito specimens are preserved in the National Collection of Arthropod Vectors (CIREV) at INSPI-Quito (Instituto Nacional de Investigación en Salud Pública). The nomenclature used in this study follows the accepted species names established by Harbach and Kitching (1998) and the abbreviations for genera and subgenera conform to the conventions proposed by Reinert (Reinert 2001, 2009).

Species identification was performed using taxonomic literature, incorporating original species descriptions and subsequent taxonomic revisions. Additionally, molecular identification using COI marker confirmed 30 species: six *Aedes*, seven *Anopheles*, 11 *Culex*, two *Limatus*, one *Mansonia*, one *Psorophora*, and two *Sabethes*. Molecular identification using ITS2 marker confirmed three species: one *Psorophora* and two *Coquillettidia*. COI gene fragments from 91 specimens were sequenced using Sanger technology. In addition, three specimens underwent further sequencing with Illumina AmpliSeq due to the low quality of their initial Sanger-generated sequences. For these runs, ITS2 primers ITS2_5.8-F (5'-TGTGAACTGCATGACACAT-3'), ITS2_A-F (5'-TGTGAACTGCAGGACACAT-3') and ITS2_28-R (5'-ATGCTTAAATTTAGGGGGTA-3') (Paskewitz and Collins 1990; Beebe and Saul 1995) were included. PCR amplifications for the COI gene were initially performed using the universal primers LCO1490-F (5'-GGTCAACAAATCATAAAGATATTGG-3') and HCO2198-R (5'-TAAACTTCAGGGTGACCAAAAAATCA-3') (Folmer et al. 1994). In cases where these primers yielded sequences of poor quality, an alternative primer set, Kumar-F (5'-GGATTTGGAAATTGATTAGTTCCTT-3') and Kumar-R (5'-AAAAATTTTAATTCCAGTTGGAACAGC-3'), was employed to improve sequence reliability (Kumar et al. 2007). Sequences obtained in this study were deposited in GenBank under BioProject PRJNA1400953, which contains all sequences generated.

To update the species checklist, an extensive literature review was conducted, including mosquito catalogs (Belkin 1962; Belkin et al. 1965a; Forattini 1965; Berlin 1969; Stone 1970; Arnell 1973; Gorham et al. 1973; Zavortink 1973, 1979; Knight and Stone 1977; Faran 1979, 1980; Heinemann and Belkin 1979; Berlin and Belkin 1980; Sirivanakarn and Galindo 1980; Faran and Linthicum 1981), recognized taxonomic databases (Bánki et al. 2025; GBIF-Secretariat 2025), reports (AFPMB 1998), and peer-reviewed scientific articles. All species were included with annotations indicating: (1) valid species, (2) availability of specimens, and (3) new country record.

A total of 266 mosquito species, representing 22 genera of the family Culicidae, are listed alphabetically. The number of species per subfamily, tribe, and genus is summarized in Table 1. The geographic distribution of the species collected and preserved in the National Collection of Arthropod Vectors is presented in Fig. 1A–I.

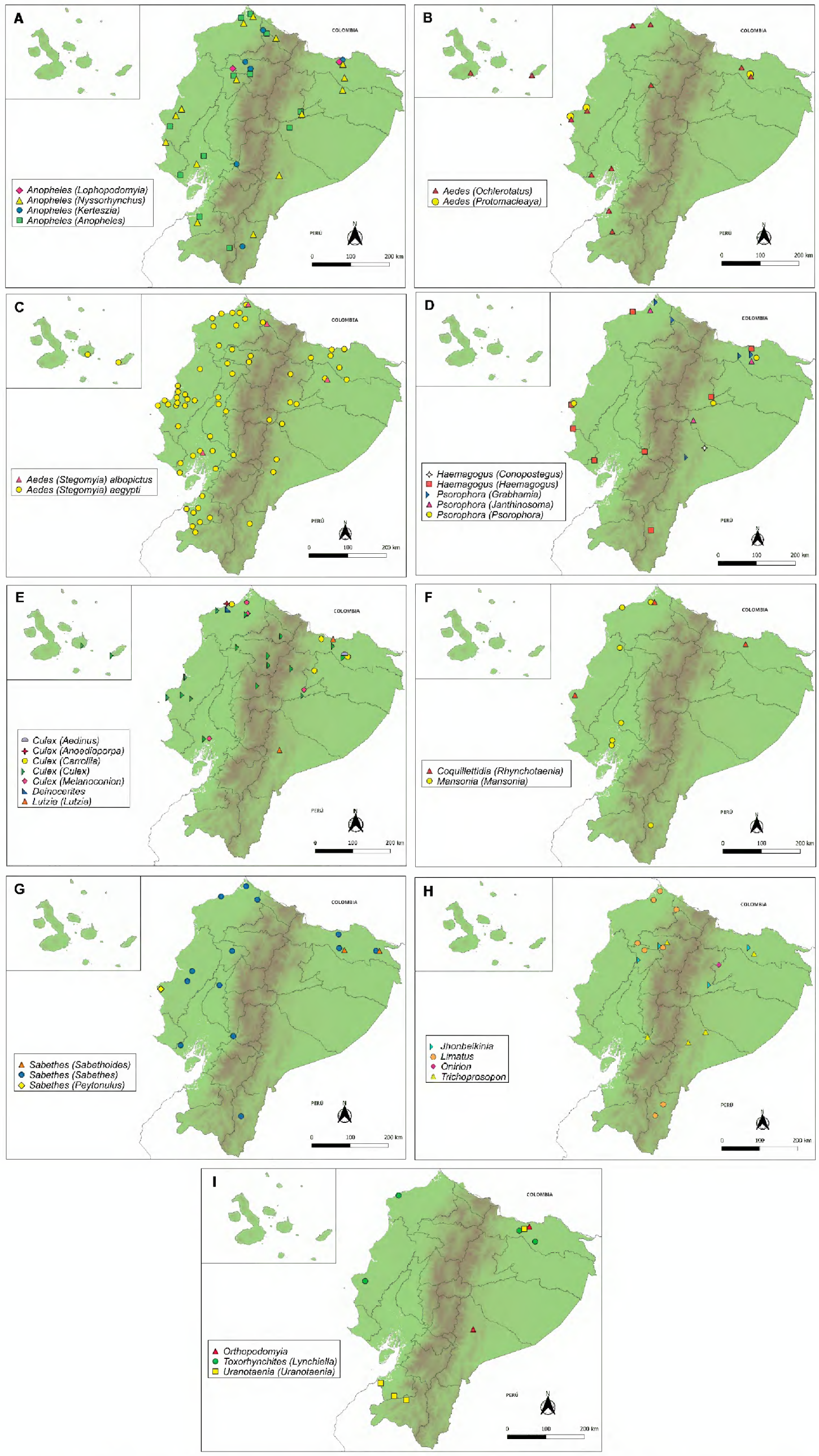

Figure 1. Geographic distribution of genera collected and preserved in the National Collection of Arthropod Vectors. **A.** *Anopheles* genus. **B–D.** Tribe Aedini. **E.** Tribe Culicini. **F.** Tribe Mansoniini. **G, H.** Tribe Sabethini. **I.** Tribe Orthopodomyiini, Toxorhynchitini, and Uranotaeniini. Each map includes an inset providing a separate view of the Galápagos Islands.

Table 1. Summary of mosquito species richness by subfamily, tribe, and genus, including the total number of species recorded in Ecuador.

Subfamily: Anophelinae (45 species)		
Tribe	**Genus**	**Number of species**
N/A	*Anopheles*	42
N/A	*Chagasia*	3
Subfamily: Culicinae (221 species)		
Aedeomyiini	*Aedeomyia*	1
Aedini	*Aedes*	27
	Haemagogus	13
	Psorophora	14
Culicini	*Culex*	83
	Deinocerites	1
	Galindomyia	1
	Lutzia	2
Mansoniini	*Coquillettidia*	6
	Mansonia	5
Orthopodomyiini	*Orthopodomyia*	3
Sabethini	*Johnbelkinia*	2
	Limatus	5
	Onirion	1
	Runchomyia	1
	Sabethes	14
	Trichoprosopon	9
	Wyeomyia	20
Toxorhynchitini	*Toxorhynchites*	7
Uranotaeniini	*Uranotaenia*	6
Total number of species		**266**

Data for 60 species warrant further scrutiny, most originally described or recorded by Roberto Levi-Castillo. The absence of type specimens from his records requires further sampling and analyses to confirm their taxonomic identities and prevent misidentifications. The fate of all the mosquito specimens deposited by Levi-Castillo at the Centro Ecuatoriano de Investigaciones Entomológicas in Guayaquil during the 1950s remains unknown. Among these, *Culex* (*Culex*) *guayasi* and *Culex* (*Culex*) *quitensis* remain unrecognized, leaving their status unresolved (Bram 1967). Additionally, although *Lutzia* and *Onirion* are treated as genera in this checklist, their taxonomic placement remains under debate (Harbach 2007; Kitching et al. 2015).

Detailed information on 17 mosquito species documented as new records is provided in Table 2. For each species, we provide the collection locality, date, habitat, collection method, and institutional code. These specimens were collected between 2010 and 2025 from multiple localities across the country. Their geographical distribution is illustrated in Fig. 2A–D. The geographic coordinates of the collection sites are provided in Suppl. material 1.

Table 2. Information on new mosquito records for Ecuador. Taxonomic classification, collection locations, collection dates, and collection methods are detailed.

N°	Species	Locality	Date	Habitat	Collection methods	Institution code
1	*Anopheles* (*Anopheles*) *malefactor*	Esmeraldas: Borbón	26 Jan. 2022	Secondary Forest	CDC Trap	ECU27944
2	*Anopheles* (*Nyssorhynchus*) *evansae*	Sucumbíos: Shushufindi	20 Jul. 2015	Periurban	Manual (immatures)	ECU8136, ECU8137
3	*Anopheles* (*Nyssorhynchus*) *nuneztovari*	Zamora Chinchipe: Yantzaza	23 Jul. 2015	Secondary Forest	Manual (immatures)	ECU8123, ECU8124, ECU8130
		Morona Santiago: Sucúa	18 Aug. 2015	Periurban	Manual (immatures)	ECU8538, ECU8539, ECU9900
		Napo: Puerto Misahuallí	18 May. 2015	Secondary Forest	Manual (immatures)	ECU7297 ECU7298
		Sucumbíos: Shushufindi	17 Jul. 2015	Secondary Forest	Manual (immatures)	ECU8134, ECU8135
		Orellana: El Edén	26 Apr. 2018	Secondary Forest	CDC Trap	ECU21452
4	*Aedes* (*Ochlerotatus*) *albifasciatus*	Manabí: Rocafuerte	24 Jul. 2014	Urban	Manual (immatures)	ECU10903
5	*Psorophora* (*Psorophora*) *holmbergii*	Sucumbíos: Pacayacu	22 Jul. 2014	Primary Forest	Human bait	ECU12276
6	*Culex* (*Aedinus*) *accelerans*	Sucumbíos: Shushufindi	26 May. 2015	Secondary Forest	Human bait	ECU3227
7	*Culex* (*Culex*) *stigmatosoma*	Manabí: Pacoche	12 Feb. 2016	Secondary Forest	Manual (immatures)	ECU12428, ECU12429, ECU12431, ECU12432
8	*Culex* (*Culex*) *thriambus*	Manabí: Pacoche	11 Feb.2016	Secondary Forest	CDC Trap	ECU10558
9	*Coquillettidia* (*Rhynchotaenia*) *albicosta*	Sucumbíos: Sushufindi	23 Jul. 2010	Periurban	Prokopack Aspirator	ECU10696
10	*Orthopodomyia albicosta*	Morona Santiago: Macas	16 Feb. 2014	Periurban	Manual (immatures)	ECU11574, ECU11586, ECU11590
11	*Sabethes* (*Sabethes*) *albiprivus*	Chimborazo: Cumandá	26 Aug. 2014	Periurban	Manual (immatures)	ECU6283
		Esmeraldas: Rioverde	20 May. 2015	Periurban	Manual (immatures)	ECU7244, ECU8059
		Guayas: Progreso	20 May. 2015	Periurban	Manual (immatures)	ECU7154
		Los Ríos: Quevedo	01 Jan. 2014	Periurban	Manual (immatures)	ECU6094
		Manabí: Chone	14 May. 2014	Urban	Manual (immatures)	ECU6121
		Manabí: Cantón Junín	07 Jul. 2014	Periurban	Manual (immatures)	ECU6441
		Santo Domingo de los Tsáchilas: Sueño de Bolívar	22 Sep. 2015	Periurban	Manual (immatures)	ECU10100
12	*Sabethes* (*Sabethes*) *belisarioi*	Zamora Chinchipe: Copalinga	14 Nov. 2009	Primary Forest	Prokopack Aspirator	ECU10718
		Sucumbíos: Shushufindi	30 Jun. 2014	Secondary Forest	Human bait	ECU16528
		Sucumbíos: Pacayacu	04 Agu. 2014	Secondary Forest	Manual	ECU13405
13	*Sabethes* (*Sabethes*) *purpureus*	Esmeraldas: Rioverde	31 Jul. 2015	Periurban	Manual (immatures)	ECU8528
		Sucumbíos: Cuyabeno	17 Apr. 2010	Primary Forest	Prokopack Aspirator	ECU10720

N°	Species	Locality	Date	Habitat	Collection methods	Institution code
14	*Sabethes* (*Sabethes*) *quasicyaneus*	Esmeraldas: San Lorenzo	28 Oct. 2012	Periurban	Manual (immatures)	ECU3767
		Esmeraldas: Vía El Alto	31 Jul. 2015	Secondary Forest	Manual (immatures)	ECU8531
		Guayas: Progreso	22 Apr. 2015	Periurban	Manual (immatures)	ECU7158
		Manabí: Junín	07 Jul. 2014	Secondary Forest	Manual	ECU20172
15	*Sabethes* (*Sabethoides*) *glaucodaemon*	Sucumbíos: Cuyabeno	20 May. 2010	Secondary Forest	Prokopack Aspirator	ECU10716
		Sucumbíos: Shushufindi	21 Apr. 2015	Periurban	Prokopack Aspirator	ECU7093
16	*Toxorhynchites* (*Lynchiella*) *guadeloupensis*	Manabí: La Pila	24 Oct. 2014	Periurban	Manual (larvae)	ECU11017
17	*Uranotaenia* (*Uranotaenia*) *ditaenionota*	El Oro: Marcabelí	12 Apr. 2013	Periurban	Manual (larvae)	ECU4911

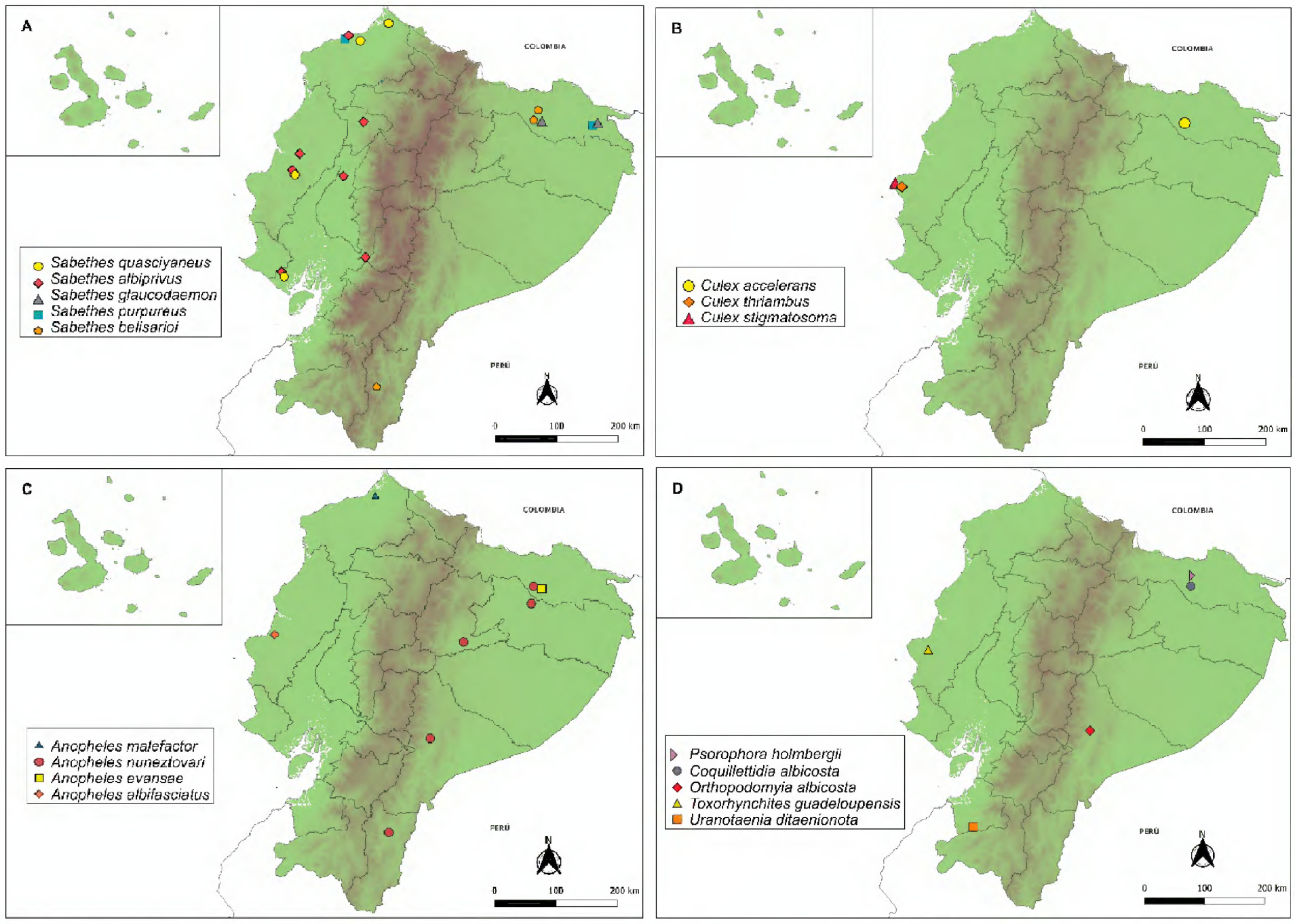

Figure 2. Geographic distribution of new mosquito records for Ecuador by species. **A.** *Sabethes* spp. **B.** *Culex* spp. **C.** *Anopheles* spp. **D.** *Psorophora*, *Coquillettidia*, *Orthopodomyia*, *Toxorhynchites* and *Uranotaenia*. Mapped occurrences correspond to data presented in Table 2. Each map includes an inset providing a separate view of the Galápagos Islands.

An updated checklist of Diptera: Culicidae

Each entry provides the synonymic names, taxonomic author, year of publication, recorded localities, and relevant literature references. The geographical distribution of the species is categorized into four regions: East (E, Amazon basin), West (W, Pacific coastal lowlands), Andean (A, Andean region), and

the Galápagos Islands (G). The institutional reference number (ECU) is provided for species deposited in the National Collection of Arthropod Vectors at INSPI-Quito. The notation NR indicates newly recorded species for Ecuador, while ** denotes endemic species and ✝ denotes species whose type locality is Ecuador. Records based solely on GBIF entries should be treated cautiously, as additional verification is required to exclude potential misidentifications.

Subfamily Anophelinae (45 species)

1. *Anopheles* (*Anopheles*) *apicimacula* Dyar & Knab, 1906.

Distribution. Sto. Domingo de los Tsáchilas: Valle Hermoso, Reserva La Perla (0°05'10.0"S, 79°16'21.0"W) (GBIF-Secretariat 2025). INSPI collection—Pichincha, near Mindo (0°06'44.8"S, 78°47'02.8"W) ECU7024; Esmeraldas: Borbón (1°05'47.4"N, 78°59'47.2"W) ECU27957, ECU27954, ECU27947. (W).

2. *Anopheles* (*Anopheles*) *calderoni* Wilkerson, 1991.

Distribution. Guayas: Yaguachi, "Hacienda Eulalia" (2°07'09.8"S, 79°41'22.9"W); Sto. Domingo de los Tsáchilas: near Tinalandia (0°16'18.0"S, 79°04'51.0"W), Valle Hermoso, Reserva La Perla (0°05'10.0"S, 79°16'21.0"W) (González et al. 2010). INSPI collection—Guayas: Eloy Alfaro (Durán) (2°09'51.9"S, 79°50'43.8"W) ECU1894; Esmeraldas: San Lorenzo (1°13'49.2"N, 78°46'00.7"W) ECU13903; Napo: Tena, Ahuano, Jatun Sacha (1°03'26.1"S, 77°36'23.0"W) ECU3473; El Oro: Arenillas ECU10372; Sto. Domingo de los Tsáchilas: Santo Domingo (0°13'20.7"S, 79°09'21.1"W) ECU19704; Esmeraldas: Borbón (1°04'55.0"N, 78°59'41.2"W) ECU27946. (E, W).

3. *Anopheles* (*Anopheles*) *eiseni* Coquillett, 1902.

Synonym. *An. niveopalpis* Ludlow, 1919.

Distribution. Morona Santiago and Zamora Chinchipe (formerly Santiago-Zamora): Cusuime, Huambi, Sucúa, Cutucú, Méndez, La Unión, Tindiuquinanda, El Tesoro (Ramírez-Aguilar 1953); Chimborazo near Huigra (2°19'2.4"S, 79°4'33.0"W); Cotopaxi near Tingo (0°54'24.6"S, 79°3'30.6"W); Pichincha: Mindo fish farm (0°4'9.0"S, 78°45'42.6"W) (Pinault and Hunter 2011). INSPI collection—Esmeraldas: Chuchubí (0°53'03.8"N, 78°30'56.0"W) ECU3773; Pastaza: Mariscal Sucre (1°21'35.9"S, 77°51'59.8"W) ECU11012. (A, E, W).

4. *Anopheles* (*Anopheles*) *fluminensis* Root, 1927.

Synonym. *An. holmbergi* Pont & Heredia, 1945.

Distribution. Orellana: Yasuní National Park, Tiputini Biodiversity Station, Harpía Trail, 800 m a.s.l. (00°38'02.7"S, 076°08'43.3"W) (Linton et al. 2013). INSPI collection—Napo: Tena, Ahuano, Jatun Sacha (1°03'26.1"S, 77°36'23.0"W) ECU3474. (E).

5. *Anopheles* (*Anopheles*) *forattinii* Wilkerson & Sallum, 1999.

Distribution. Orellana: Yasuní National Park, Tiputini Biodiversity Station, Harpía Trail, 1,500 m a.s.l. (00°37'32.3"S, 076°08'52.0" W) (Linton et al. 2013). (E).

6. *Anopheles* (*Anopheles*) *malefactor* Dyar & Knab, 1907.

Distribution. INSPI collection—Esmeraldas: Borbón (1°05'47.4"N, 78°59'47.2"W) ECU 27944. (NR, W).

7. *Anopheles* (*Anopheles*) *mattogrossensis* Lutz & Neiva, 1911.

Synonym. *An. amazonicus* Christophers, 1923.

Distribution. Ecuador (Gorham et al. 1973); Orellana: Yasuní National Park, Tiputini Biodiversity Station, lake ~ 4 hectares (00°37'32.3"S, 076°08'52"W) (Linton et al. 2013). (E).

8. *Anopheles* (*Anopheles*) *mediopunctatus* (Lutz, 1903).

Synonyms. *An. costalimai* Courtinho, 1944; *An. limai* Fonseca & Silva Ramos, 1939; *Cyclolepidopteron rockefelleri* Peryassú, 1923; *Cycloleppteron mediopunctatus* Theobald, 1903.

Distribution. Guayas: Guayaquil and its surroundings (Campos 1925); Esmeraldas; Los Ríos; Manabí; Guayas (Levi-Castillo 1945b); Ecuador (Levi-Castillo 1958). (W).

9. *Anopheles* (*Anopheles*) *neomaculipalpus* Curry, 1931.

Distribution. INSPI collection—Pichincha, near Mindo (0°06'44.8"S, 78°47'02.8"W) ECU7023; Sto. Domingo de los Tsáchilas: Santo Domingo (0°15'06.7"S, 79°10'58.5"W) ECU8235. (W).

10. *Anopheles* (*Anopheles*) *peryassui* Dyar & Knab, 1908.

Synonyms. *An. celidopus* Dyar & Shannon, 1925; *An. alagoani* Peryassu, 1925; *Manguinhosia lutzi* Cruz, 1907.

Distribution. Ecuador (Levi-Castillo 1958).

11. *Anopheles* (*Anopheles*) *pseudopunctipennis* Theobald, 1901.

Synonyms. *An. pseudopunctipennis* spp. *levicastilloi* Levi-Castillo, 1944; *An. pseudopunctipennis* spp. *neghmei* Mann, 1950; *An. pseudopunctipennis* spp. *noei* Mann, 1950; *An. rivadeneirai*; *An. argentinus* Brèthes, 1912; *An. tucumanus* Lahille, 1912; *An.* var. *bifoliata* Osorno-Mesa & Munoz-Sarmiento, 1948; *An. willardi* Vargas, 1941.

Distribution. Guayas: Chongón, km 18–19 on Rt. 3, near roadshrine (02°11'32.7"S, 80°02'24"W); Esmeraldas: La Propicia 1 (00°56'0.2"N, 079°39'28.6"W); Guayas: just S of Valdivia: San Pedro (01°56'54.4"S, 080°43'56.9"W) (GBIF-Secretariat 2025); from sea level to 2,500 m a.s.l. (Levi-Castillo 1945a); Loja; Pichincha; Imbabura; up to 1,930 m a.s.l. (Pinault and Hunter 2011); Imbabura: Cachaco (0°49'41.2"N, 78°24'03.6"W) (Navarro et al. 2015). INSPI collection—Manabí, Puerto Cayo (1°20'47.5"S, 80°39'15.4"W) ECU20423; Guayas: Progreso (2°28'00.7"S, 80°24'43.8"W) ECU7137; Imbabura: Cachaco (0°49'56.8"N, 78°24'00.1"W) ECU3774; Manabí: Puerto Cayo (1°20'47.5"S, 80°39'15.4"W) ECU20444; Loja: Malacatos (4°13'17.7"S, 79°15'38.9"W) ECU6115. (A, W).

12. *Anopheles* (*Anopheles*) *punctimacula* Dyar & Knab, 1906.

Synonyms. *An. venezuelae* Evans, 1922; *An. strigimacula* Dyar & Knab, 1906; *An. malefactor* Dyar & Knab, 1907; *An. apicimacula* Howard et al. (nec Dyar & Knab), 1917; *An. venezuelae* Evans, 1922.

Distribution. Coastal-side foothills of the Andes, 147–1,906 m a.s.l. (Pinault and Hunter 2011). INSPI collection—El Oro: El Retiro (3°26'02.3"S, 79°57'57.5"W) ECU19017; Sucumbíos: General Farfán (0°09'54.9"N, 76°40'39.0"W) ECU18675; Esmeraldas: Maldonado (1°04'03.0"N, 78°54'38.5"W) ECU27630. (A, E, W).

13. *Anopheles* (*Anopheles*) *shannoni* Davis, 1931.

Distribution. Ecuador (Levi-Castillo 1958); assumed to be in Amazonian Ecuador (Wilkerson et al. 1997). (E).

14. *Anopheles* (*Anopheles*) *vestitipennis* Dyar & Knab, 1906.

Distribution. El Oro; Orellana (Quinatoa Tutillo et al. 2025). (E, W).

15. *Anopheles* (*Kerteszia*) *bambusicolus* Komp, 1937.

Distribution. Napo; Pastaza; Santiago-Zamora (Gabaldon and Cova-Garcia 1952); Orellana: Tiputini River, 6 km from Tiputini Biodiversity Station (00°39'50"S, 076°12'56"W) (Linton et al. 2013). INSPI collection— Pichincha: Mindo (0°00'41.0"N, 78°48'33.2"W) ECU10392. (E, W).

16. *Anopheles* (*Kerteszia*) *boliviensis* (Theobald, 1905).

Synonym. *Ker. boliviensis* Theobald, 1905.

Distribution. Napo, Orellana, and Pastaza (formerly Napo-Pastaza); Morona Santiago and Zamora Chinchipe (formerly Santiago-Zamora) (Levi-Castillo 1945b; Gabaldon and Cova-Garcia 1952). (E).

17. *Anopheles* (*Kerteszia*) *cruzii* Dyar & Knab, 1908.

Distribution. Ecuador (Lane 1953).

18. *Anopheles* (*Kerteszia*) *homunculus* Komp, 1937.

Synonym. *An. anoplus* Komp, 1937.

Distribution. Ecuador (Levi-Castillo 1949a).

19. *Anopheles* (*Kerteszia*) *lepidotus* Zavortink, 1973.

Distribution. Orellana (0°38'24.0"S, 76°08'24.0"W) (GBIF-Secretariat 2025); Orellana: Yasuní National Park, Tiputini Biodiversity Station (0°38'17.00"S, 76°8'42.00"W) (Harrison et al. 2012; Linton et al. 2013). (E).

20. *Anopheles* (*Kerteszia*) *neivai* Howard, Dyar & Knab, 1913.

Synonym. *An. hylephilus* Dyar & Knab, 1917.

Distribution. Guayas: Guayaquil, Posorja (Campos 1922, 1925); Bolívar: Balzapamba (01°46'00.9"S, 079°10'55.3"W); Guayas: Guayaquil (02°08'19.5"S, 079°55'00.6"W); Los Ríos: Montalvo (01°47'23.1"S, 079°17'14.8"W); Pichincha: Tandapi (00°24'56.3"S, 078°47'53.7"W) (Zavortink 1973); Esmeraldas; Manabí; Guayas: Guayaquil, El Salado (02°10'43.6"S, 79°54'15.2"W); Sto. Domingo de los Tsáchilas: near Tinalandia (00°17'35"S, 079°03'50"W), Valle Hermoso (00°05'10"S, 079°16'21"W); Orellana: Tiputini River, 6 km from Tiputini Biodiversity Station (00°39'50"S, 076°12'56"W) (GBIF-Secretariat 2025); Morona Santiago: Cusuime (Ramírez-Aguilar 1953); Imbabura: Lita (0°52'11.8"N, 78°27'05.6"W), Cachaco (0°49'41.2"N, 78°24'03.6"W); Esmeraldas: Alto Tambo (0°55'49.00"N, 78°32'37.00"W) (Navarro et al. 2015). INSPI collection—Sucumbíos: Nueva Loja (0°12'15.1"N, 76°39'27.2"W) ECU18669, Pichincha: 1.5 km from the Pachijal River (0°10'14.8"N, 78°55'51.0"W) ECU3222; Pichincha: Mindo (0°00'41.0"N, 78°48'33.2"W) ECU10403; Esmeraldas: Chuchubí (0°53'03.8"N, 78°30'56.0"W) ECU8589; Zamora Chinchipe: Parque Nacional Podocarpus (4°07'40.6"S, 78°59'44.2"W) ECU11367; Chimborazo: Cumandá (2°12'46.1"S, 79°07'54.9"W) ECU18643. (A, E, W).

21. *Anopheles* (*Kerteszia*) *pholidotus* Zavortink, 1973.

Distribution. Pichincha, Mindo, Sachatamia Lodge, at km 78 on the Quito-Calacali highway (GBIF-Secretariat 2025); Pastaza (Quinatoa Tutillo et al. 2025). (E, W)

22. *Anopheles* (*Lophopodomyia*) *gilesi* (Peryassú, 1908).

Synonym. *Myzorhynchella gilesi* Peryassú, 1908.

Distribution. Pastaza (Quinatoa Tutillo et al. 2025). (E).

23. *Anopheles* (*Lophopodomyia*) *gomezdelatorrei* Levi-Castillo, 1955†.**

Distribution. Type locality: Carchi, Chiltazón, 2,880 m a.s.l. (Levi-Castillo 1955c, 1958; Stone et al. 1959; Gorham et al. 1973). (A).

24. *Anopheles* (*Lophopodomyia*) *squamifemur* Antunes, 1937.

Distribution. Orellana: Yasuní National Park, 3.5 km from Tiputini Biodiversity Station (00°38'18"S, 76°10'55"W) (Linton et al. 2013). INSPI collection—Sucumbíos: Nueva Loja (0°09'55.5"N, 76°40'34.3"W) ECU18602; Pichincha: Caoní River (0°00'48.4"N, 79°09'36.0"W) ECU14931. (E, W).

25. *Anopheles* (*Lophopodomyia*) *vargasi* Gabaldón, Cova García & Lopez, 1941.

Distribution. Morona Santiago, Sucúa, Parroquia Huambi (2°32'00.0"S, 78°10'00.1"W) (Ramírez-Aguilar 1953); Ecuador (Levi-Castillo 1958). (E).

26. *Anopheles* (*Nyssorhynchus*) *albimanus* Wiedemann, 1820.

Synonyms. *An. albipes* Theobald, 1901; *An. bisignatus* Hoffmann, 1938; *An. cubensis* Agramonte, 1900; *An. gorgasi* Dyar & Knab, 1907; *An. tarsimaculata* Goeldi, 1905; *An. trisignatus* Hoffmann, 1938.

Distribution. Esmeraldas: near Las Palmas Port (0°59'20.6"N, 79°38'54.8), near Atacames (0°52'34.4"N, 79°50'45.6"W), Isla La Burrera (00°57'20.5"N, 79°38'33.8"W), road to Muisne (00°46'37"N, 079°55'56"W); Guayas: Chongón, at km 24 on Rt. 3, near road to Chongón (02°13'10.5"S, 080°05'05.8"W); Guayaquil (02°12'05"S, 079°53'46"W); Milagro River (02°08"12"S, 079°41'07.9"W); Los Ríos: Pichilingue (01°06'11.9"S, 079°29'7.8"W); Pichincha: Reserva La Perla, Valle Hermoso (00°05'43.7"S, 079°18'06.3"W) (Heinemann and Belkin 1979); Imbabura, Mira River valley, 767—832 m a.s.l. (00°32'32.5"N, 078°02'34.6"W); Pichincha: near La Hesperia Biological Station, 1,366 m a.s.l. (00°21'00.1"S, 078°51'13.2"W); Azuay: near Girón, 1,541 m a.s.l. (03°09'35"S, 079°08'49.3"W) (Pinault and Hunter 2011); Esmeraldas: Borbón, Muisne (Kroeger et al. 1995); Imbabura: Cachaco (0°49'41.2"N, 78°24'03.6"W) (Navarro et al. 2015). INSPI collection—Imbabura, 90 m of San Lorenzo road (0°44'27.9"N, 78°13'58.4"W) ECU8587; Manabí: Rocafuerte (0°54'37.5"S, 80°26'08.6"W) ECU6647; Guayas: Guayaquil (2°14'23.1"S, 80°05'01.9"W) ECU6377; Napo: Puerto Misahuallí (1°01'41.8"S, 77°37'42.5"W) ECU7174; Esmeraldas: Borbón (1°05'33.2"N, 78°59'07.6"W) ECU28826 (A, E, W).

27. *Anopheles* (*Nyssorhynchus*) *albitarsis* Lynch Arribálzaga, 1878.

Synonyms. *An. allopha* Peryassu, 1939; *An. domesticus* Galvao & Damasceno, 1944; *An. imperfectus* Correa & Ramos, 1943; *An. limai* Galvao & Lane, 1937.

Distribution. Ecuador (AFPMB 1998).

28. *Anopheles* (*Nyssorhynchus*) *aquasalis* Curry, 1932.

Synonyms. *An. delta* Anduze, 1948; *An. deltaorinoquensis* Cova García, Pulido & Amarista, 1977; *An. emilianus* Komp, 1941; *An. guarauno* Anduze, 1948; *An. guarujaensis* Ramos, 1942.

Distribution. Guayas: Guayaquil Gulf (Forattini 1965). INSPI collection— Esmeraldas: San Lorenzo (1°14'58.8"N, 78°45'59.6"W) ECU18146; El Oro: Arenillas (3°32'54.2"S, 80°03'52.9"W) ECU10357; Manabí: El Guayabal (1°03'48.2"S, 80°34'06.4"W) ECU11658. (W).

29. *Anopheles* (*Nyssorhynchus*) *argyritarsis* Robineau-Desvoidy, 1827.

Synonym. *An. rooti* Brèthes, 1926.

Distribution. INSPI collection—Manabí: Ayampe (1°40'46.2"S, 80°48'13.4"W) ECU6953. (W).

30. *Anopheles* (*Nyssorhynchus*) *benarrochi* Gabaldón, Cova García & López, 1941.

Distribution. Morona Santiago: Taisha, Wachirpas (2°34'48.0"S, 76°48'00.0"W) (GBIF-Secretariat 2025). INSPI collection—Sucumbíos: Shushufindi (0°10'55.1"S, 76°38'07.5"W) ECU9797 (E).

31. *Anopheles* (*Nyssorhynchus*) *darlingi* Root, 1926.

Synonym. *An. paulistensis* Galvao, Lane & Correa, 1937.

Distribution. East of the Andes (Faran and Linthicum 1981); Ecuador (Levi-Castillo 1958; Arregui et al. 2015; GBIF-Secretariat 2025).

32. *Anopheles* (*Nyssorhynchus*) *evansae* Brèthes, 1926.

Synonyms. *An. noroestensis* Galvao & Lane, 1937; *An. ayrozai* Unti, 1940; *An. clarki* Komp, 1942; *An. metcalfi* Galvão & Lane, 1937; *Cel. evansae* Brèthes, 1926; *Cel. evansi* Brèthes, 1926.

Distribution. INSPI collection—Sucumbíos: Shushufindi (0°15'0.60"S, 76°36'48.08"W) ECU8136, ECU8137. (NR, E).

33. *Anopheles* (*Nyssorhynchus*) *konderi* Galvão & Damasceno, 1942.

Distribution. Orellana: Yasuní National Park, Tiputini Biodiversity Station, lake ~ 4 hectares (0°38'13.52"S, 76°9'0.33"W); Harpía Trail, 1,500 m a.s.l. (0°37'32.30"S, 76° 8'52.03"W); Tiputini River, blackwater area ~ 3.5 km from Tiputini Biodiversity Station (0°38'18.00"S, 76°10'55.00"W); Maquisapa Trail (0°37'34.91"S, 76°10'12.13"W) (Linton et al. 2013); Orellana: Coca, Cañón de los Monos (0°20'36.28"S, 77°0'25.23"W), Juan Montalvo (0°28'21.00"S, 76°59'29.04"W), Guamayacu, Tiputini (0°38'17.16"S, 76°8'42.01"W) (Ruiz-Lopez et al. 2013). (E).

34. *Anopheles* (*Nyssorhynchus*) *marajoara* Galvão & Damasceno, 1942.

Distribution. Sucumbíos (Quinatoa Tutillo et al. 2025). (E).

35. *Anopheles* (*Nyssorhynchus*) *nuneztovari* Gabaldón, 1940.

Synonym. *An. goeldii* Rozeboom & Gabaldón, 1941.

Distribution. INSPI collection—Zamora Chinchipe: Yantzaza (78°45'45.26" W 03°49'50.98"S) ECU8123, ECU8124, ECU8130; Morona Santiago: Sucúa (02°27'18.93"S, 78°09'32.05"W) ECU8538, ECU8539, ECU9900; Napo: Puerto Misahuallí (1°1'56.97"S, 77°40'14.37"W) ECU7297, ECU7298; Sucumbíos: Shushufindi (0°12'55.70"S, 76°38'37.70"W) ECU8134, ECU8135; Orellana: El Edén (0°28'06.6"S, 76°40'43.7"W) ECU21452 (NR, E).

36. *Anopheles* (*Nyssorhynchus*) *oswaldoi* (Peryassú, 1922).

Synonyms. *An. aquacaelestis* Curry, 1932; *An. metcalfi* Galvao & Lane, 1937.

Distribution. Orellana: Yasuní National Park, near Tiputini Biodiversity Station (00°38'18"S, 076°10'55"W) (GBIF-Secretariat 2025); Pastaza: Mera, 1,233 m a.s.l. (01°27'27.5"S, 078°06'37.3"W); Tungurahua: Río Verde, 1,230 m a.s.l. (01°24'13.3"S, 078°18'03.7"W); Napo: Tena and Archidona (00°54'31.1"S, 077°48'29.9"W); Pastaza: Puyo (01°29'42.6"S, 077°59'19.7"W); Zamora Chinchipe: Zamora (Pinault and Hunter 2011). INSPI collection—Napo: Tena, Jatun Sacha (1°03'26.1"S, 77°36'23.0"W) ECU3475; Morona Santiago: Río Blanco (2°20'15.3"S, 78°09'50.4"W) ECU7495. (E).

37. *Anopheles* (*Nyssorhynchus*) *rangeli* Gabaldón, Cova García & López, 1940.

Distribution. Morona Santiago: Sucúa; Sucumbíos (formerly Napo): Limoncocha (00°24'01.4"S, 076°38'01.5"W); Napo: Tena; Pastaza: Puyo (Faran 1980); Morona Santiago: Sucúa (02°28'12"S, 078°10'07.7"W); Napo: 1.5 km S from Tena (01°01'14"S, 077°49'01.5"W); Pastaza: 4 km N from Puyo (01°28'01.4"S, 077°58'01.5"W) (GBIF-Secretariat 2025); Morona Santiago: Arapicos, Cusuime, Huambi, Sucúa, Cutucú, Cuyatza, Tindiuquinanda, Ambazha, Catachiyacu, Santa Marianita, Ceipa, Miriumi, La Unión, Chapi, Asunción, Huambinimi, Quimi, San José, Sungaime, Cachayacu, Imbiano, Ambaza, La Banda, Guayataza, Yuquiaza, Yurupaza, Ieminbis, Topo (Ramírez-Aguilar 1953); Lower-Napo region: Morona Santiago, Napo, Pastaza (Faran and Linthicum 1981); Napo: Coca (Fritz et al. 2004). INSPI collection—Sto. Domingo de los Tsáchilas: Santo Domingo (0°13'20.7"S, 79°09'21.1"W) ECU19705; Sucumbíos: Shushufindi (0°07'55.5"N, 76°40'12.1"W) ECU14943; Zamora Chinchipe: Yantzaza (3°49'47.9"S, 78°42'06.4"W) ECU10084. (E, W).

38. *Anopheles* (*Nyssorhynchus*) *strodei* Root, 1926.

Distribution. It is presumably found in eastern Ecuador (Faran 1980); Esmeraldas; Morona Santiago (Quinatoa Tutillo et al. 2025). (E, W).

39. *Anopheles* (*Nyssorhynchus*) *triannulatus* (Neiva & Pinto, 1922).

Synonyms. *An. bachmanni* Petrocchi, 1925; *An. chagasi* Galvao, 1941; *An. cuyabensis* Neiva & Pinto, 1923.

Distribution. Orellana (formerly Napo): Limoncocha (00°24'01.4"S, 076°38'01.5"W); Napo: Tena (00°59'48"S, 077°48'49.3"W); Pastaza: Puyo (Faran 1980); Morona Santiago: Sucúa (02°27'27.2"S, 078°10'15.1"W); Pastaza: Puyo (01°28'01.4"S, 077°59'01.5"W) (GBIF-Secretariat 2025). INSPI collection—Morona Santiago: Sucúa (2°27'18.9"S, 78°09'32.1"W) ECU9857; Morona Santiago: Sucúa (2°27'18.9"S, 78°09'32.1"W) ECU3198. (E).

40. *Anopheles* (*Nyssorhynchus*) *trinkae* Faran, 1979†.

Distribution. Type locality: Pastaza: Puyo (Faran 1979); Napo: Tena (00°59'48"S, 077°48'49.3"W); Pastaza: Puyo (01°28'01.4"S, 077°59'01.5"W) (Faran 1980); Napo: Sardina Yaku (Fritz et al. 2004); Orellana (formerly Napo): Coca (00°27'49"S, 076°58'18.8"W); Sucumbíos: Lago Agrio, (00°05'1.7"N, 076°53'0.1"W) (Lounibos et al. 1998); Pastaza: Puyo (1°28'1.03"S, 77°59'0.18"W); Napo: Tena (1°10'1.45"S, 77°53'1.50"W) (GBIF-Secretariat 2025). INSPI collection—Zamora Chinchipe: Yantzaza (3°49'46.8"S, 78°45'43.7"W) ECU10089; Morona Santiago: Sucúa (2°27'03.5"S, 78°08'34.9"W) ECU9913; Morona Santiago: Río Blanco (2°20'15.3"S, 78°09'50.4"W) ECU7508; Napo: Puerto Misahualli (1°01'57.0"S, 77°40'14.4"W) ECU7299; Napo: Tena (1°01'40.8"S, 77°37'37.6"W) ECU7183. (E).

41. *Anopheles* (*Stethomyia*) *kompi* Edwards, 1930.

Distribution. Ecuador (Levi-Castillo 1949a, 1958; Gorham et al. 1973).

42. *Anopheles* (*Stethomyia*) *nimbus* (Theobald, 1902).

Distribution. Orellana; Morona Santiago (Quinatoa Tutillo et al. 2025). (E).

43. *Chagasia bathana* (Dyar, 1928).

Distribution. Sto. Domingo de los Tsáchilas: Santo Domingo (0°15'19.7"S, 79°10'48.7"W) (Harbach and Howard 2009); Orellana: Tiputini Biodiversity Station (00°38'15.5"S, 076°09'59.3"W) (Sallum et al. 2002). (E, W).

44. *Chagasia bonneae* Root, 1927.

Distribution. Orellana (formerly Napo): Coca, confluence of Coca and Napo rivers, 250 m a.s.l. (0°28'00.0"S, 76°58'00.0"W) (Heinemann and Belkin 1979); Orellana: Yasuní National Park, Tiputini River, blackwater area ~ 3.5 km from Tiputini Biodiversity Station (00°38'18"S, 76°10'55"W) (Linton et al. 2013); Orellana (formerly Napo) Coca; Napo: Tena; Pastaza: Santa Ana (Harbach and Howard 2009). (E, W).

45. *Chagasia fajardi* (Lutz, 1904).

Synonyms. *Ch. maculata* Peryassú, 1921; *Ch. neivae* Cruz, 1906; *Ch. stigmopteryx* Martini, 1932; *Pyretophorus fajardi* Lutz, 1904.

Distribution. Orellana: Yasuní National Park, Tiputini Biodiversity Station, Harpía Trail, 750 m a.s.l. (00°37'50.2"S, 076°08'43.4"W) (Linton et al. 2013). (E).

Subfamily Culicinae. Tribe Aedeomyiini (1 species)

46. *Aedeomyia* (*Aedomyia*) *squamipennis* (Lynch Arribálzaga, 1878).

Synonym. *Ae. squamipennis* Lynch Arribálzaga, 1878.

Distribution. Los Ríos: Babahoyo (Calisher et al. 1981). (W).

Subfamily Culicinae. Tribe Aedini (54 species)

47. *Aedes* (*Aedimorphus*) *vexans* (Meigen, 1830).

Synonyms. *Cx. parvus* Macquart, 1834; *Cx. articulatus* Rondani, 1872; *Cx. malariae* Grassi, 1898; *Cx.* sylvestris Theobaldo, 1901; *Ae. nocturnus* Theobald, 1903; *Cx. montcalmi* Blanchard, 1905; *Cda. minuta* Theoblad, 1907; *Cda. nipponii* Theobald, 1907; *Cda. eruthrosops* Theobald, 1910; *Cx. sudanensis* Theobald, 1911; *Ae. euochrus* Howard, Dyar & Knab, 1917.

Distribution. Galápagos: "Archipiélago de Galápagos" (Campos 1922). (G).

48. *Aedes* (*Howardina*) *albonotatus* (Coquillett, 1906).

Synonym. *Gy. albonotata* Coquillett, 1905.

Distribution. Pichincha; Imbabura; Bolívar; Chimborazo (Levi-Castillo 1952b, 1953d); Ecuador (Levi-Castillo 1958). (A).

49. *Aedes* (*Howardina*) *brevivittatus* Berlin, 1969†.**

Distribution. Type locality: Azuay: Zorrocucho, E of Girón, Cerro Tinajillas (03°11'12"S, 079°02'07.8"W) (Heinemann and Belkin 1979); Sto. Domingo de los Tsáchilas, 50 km SE from Tandapi (00°23'11.9"S, 078°46'07.7"W) (Berlin 1969). INSPI collection—Pichincha: Nanegalito, ECU 3258. (A, W).

50. *Aedes* (*Howardina*) *ecuadoriensis* Berlin, 1970†.**

Distribution. Type locality: Azuay: Oña, ~ 10 km N of León River at km 99 on Cuenca-Loja highway (3°32'00.0"S, 79°10'00.0"W) (Heinemann and Belkin 1979); Imbabura: Ibarra, Taguando River (0°21'00.0"N, 78°07'00.0"W) (Berlin 1969; Heinemann and Belkin 1979). (A).

51. *Aedes* (*Howardina*) *eleanorae* Berlin, 1969.

Distribution. Napo: Colonso Chalupas Biological Reserve, 1,230 m a.s.l. (0°56'25.2"S, 77°54'00.0"W) (Navarro et al. 2016). (E).

52. *Aedes* (*Howardina*) *fulvithorax* (Lutz, 1904).

Synonyms. *Ae. tachirensis* Anduze, 1947; *Haemagogus fulvithorax* Lutz, 1904; *Taeniorhynchus palliatus* Coquillett, 1906.

Distribution. Pichincha: Quito D.M.; Pululahua Geobotanical Reserve; Pululahua Volcano, 2,101 m a.s.l. (0°03'28.2"N, 78°30'29.1"W) (Navarro et al. 2016). (A).

53. *Aedes* (*Howardina*) *pseudodominicii* Komp, 1936.

Synonym. *Ae. delpontei* Martinez & Prosen, 1955.

Distribution. Napo, Orellana, and Pastaza (formerly Napo-Pastaza); Pichincha: Tandapi (Levi-Castillo 1953c). (E).

54. *Aedes* (*Howardina*) *sexlineatus* (Theobald, 1901).

Synonyms. *Stegomyia dominicii* Rangel & Romero Sierra, 1907; *St. sexlineatus* Theobald, 1901.

Distribution. Napo: Colonso-Chalupas Biological Reserve, 1,230 m a.s.l. (0°56'25.2"S, 77°54'00.0"W) (Navarro et al. 2016). INSPI collection— Pichincha: Nanegalito ECU3260; Pichincha: Quito ECU16510; Manabí: San Lorenzo ECU10666; Orellana: Loreto, Bigal River ECU8594; Loja: Alamor ECU19111. (A, E, W).

55. *Aedes* (*Howardina*) *quadrivittatus* (Coquillett, 1902).

Synonym. *Cx. quadrivittatus* Coquillett, 1902.

Distribution. Azuay; Cañar; Pichincha; Imbabura (Levi-Castillo 1953c); Ecuador (Levi-Castillo 1958; AFPMB 1998). (A).

56. *Aedes* (*Ochlerotatus*) *albifasciatus* (Macquart, 1838).

Synonyms. *Ae. colonarius* Dyar, 1924; *Ae. philippii* Dyar, 1924; *Cx. albifasciatus* Macquart, 1838; *Cx. annuliferus* Blanchard, 1852; *Cx. flavipes* Macquart, 1838; *Ochlerotatus albifasciatus* Macquart, 1838.

Distribution. Manabí: Rocafuerte, El Ceibal (0°55'25.07"S, 80°28'9.14"W) ECU10903. (NR, W).

57. *Aedes* (*Ochlerotatus*) *angustivittatus* Dyar & Knab, 1907.

Synonyms. *Aedes argentescens* Dyar & Knab, 1908; *Aedes cuneatus* Dyar & Knab, 1908; *Aedes traversus* Dyar, 1925.

Distribution. Guayas ~ 30 km SW of Quevedo, 3 km S of El Empalme, 100 m (01°06'12"S, 079°41'07.9"W); Los Ríos: Quevedo, Valencia (00°57'07.7"S, 079°21'05.9"W), Guayas: Samborondón, La Bocana estuary, road upstream from town (01°57'12"S, 079°44'7.9"W); outskirts of Los Ceibos (02°09'54.8"S, 79°55'55.6"W) (Arnell 1976; Heinemann and Belkin 1979). INSPI collection—Sucumbíos: Shushufindi (0°07'26.5"S, 76°39'02.6"W) ECU9827; Guayas: Guayaquil (2°24'30.5"S, 80°22'15.9"W) ECU7400; Esmeraldas: Borbón (1°05'05.6"N, 78°59'52.1"W) ECU 25390. (E, W).

58. *Aedes* (*Ochlerotatus*) *crinifer* (Theobald, 1903).

Synonyms. *Cx. crinifer* Theobald, 1903; *Cx. lynchii* Brèthes, 1910.

Distribution. Ecuador (Stone et al. 1959; Arnell 1973; AFPMB 1998; Bánki et al. 2025).

59. *Aedes* (*Ochlerotatus*) *fluviatilis* (Lutz, 1904)

Synonyms. *Ae. draconarius* Dyar, 1922; *Ae. lithoecetor* Dyar & Knab, 1907; *Cx. fluviatilis* Lutz, 1904; *Danielsia mediomaculata* Theobald, 1907; *Dn. tripunctata* Theobald, 1907.

Distribution. Zamora Chinchipe: Zamora, ~ 10 km NE, tributary stream of Zamora River (04°04'12"S, 078°58'07.8"W) (Heinemann and Belkin 1979); Pastaza, 31 km W of Puyo (01°28'01.4"S, 078°16'01.5"W) (GBIF-Secretariat 2025). INSPI collection—El Oro: Piñas (3°43'39.6"S, 79°53'12.4"W) ECU11366; Sto. Domingo de los Tsáchilas: Santo Domingo (0°19'05.6"S, 78°59'02.0"W) ECU 11364. (E, W).

60. *Aedes* (*Ochlerotatus*) *fulvus* (Wiedemann, 1828).

Synonyms. *Cx. flavicosta* Walker, 1856; *Cx. fulvus* Wiedemann, 1828.

Distribution. Guayaquil and its surroundings (Campos 1922, 1925); Orellana (formerly Napo), ~ 50 km E of El Coca, "Isla Pompeya" (00°26'12"S, 076°37'07.5"W); Orellana (formerly Napo): Coca, confluence of Coca and Napo rivers, 250 m a.s.l. (0°28'00.0"S, 76°58'00.0"W) (Heinemann and Belkin 1979). INSPI collection—Sucumbíos: Nueva Loja (0°05'20.0"N, 76°52'09.0"W) ECU3192; Shushufindi (0°10'14.9"S, 76°38'26.5"W) ECU7142. (E, W).

61. *Aedes* (*Ochlerotatus*) *hastatus* Dyar, 1922.

Distribution. Sucumbíos (formerly Napo): Cuyabeno, 50 km W of Tarapoa, Topography Camp, Aguas Negras (Heinemann and Belkin 1979). (E).

62. *Aedes* (*Ochlerotatus*) *hortator* Ficalbi, 1889.

Distribution. Orellana (formerly Napo): Coca, confluence of Coca and Napo rivers, 250 m a.s.l. (0°28'00.0"S, 76°58'00.0"W) (Heinemann and Belkin 1979). INSPI collection—Esmeraldas: Rioverde (1°04'05.3"N, 79°24'17.2"W) ECU7506. (E, W).

63. *Aedes* (*Ochlerotatus*) *meprai* Martinez & Prosen, 1953.

Distribution. Loja, ~ 20 km S of Loja, (04°18'01.4"S, 079°18'01.5"W) (Arnell 1976; Heinemann and Belkin 1979). (A).

64. *Aedes* (*Ochlerotatus*) *milleri* Dyar, 1922.

Synonyms. *Ae. araozi* Shannon & Ponte, 1927; *Ae. oroecetor* Martini, 1931.

Distribution. INSPI collection—Pichincha: Sangolqui (00°21'32.43"S, 78°25' 29.33"W), ECU10041, ECU16263. (A).

65. *Aedes* (*Ochlerotatus*) *nubilus* Theobald, 1903.

Synonyms. *Ae. polyagrus* Dyar, 1949; *Cx. nubilus* Theobald, 1903.

Distribution. Orellana (formerly Napo): Coca, confluence of Coca and Napo rivers, 250 m a.s.l. (0°28'00.0"S, 76°58'00.0"W) (Heinemann and Belkin 1979). (E).

66. *Aedes* (*Ochlerotatus*) *scapularis* (Rondani, 1848).

Synonyms. *Ae. camposanus* Dyar, 1918; *Ae. hemisurus* Dyar & Knab, 1906; *Cx. scapularis* Rondani, 1848; *Ochlerotatus confirmatus* Lynch Arribalzaga, 1891.

Distribution. Los Ríos: Babahoyo (01°48'10.1"S, 079°31'51.6"W); Manabí: Manta (00°57'11.8"S, 080°43'57.3"W) (Arnell 1976); Esmeraldas: Island near Las Palmas Port (00°56'55"N, 79°38'33"W); Guayas: Guayaquil, El Salado estuary, N of Catholic University of Santiago de Guayaquil (02°10'43.6"S, 079°54'15.2"W); Guayas: Guayaquil, just S of Pascuales, at km 9.5 on Rt. 2 (02°05'01.7"S, 079°56'28.2"W); Guayas: Guayaquil, ~ 5 km S of Escuela Guayas – Salado (02°16'25.5"S, 079°53'13.5"W); Guayas: Samborondón, La Bocana estuary, road upstream from town (01°57'12"S, 079°44'7.9"W); Guayas: Guayaquil, 5 km N of Mapasingue; Guayas: Guayaquil, swamp N of airport (02°08'49.5"S, 079°53'13.8"W) (Heinemann and Belkin 1979). INSPI collection—Zamora Chinchipe: Zamora, Copalinga; Sucumbíos: Shushufindi (0°10'55.4"S, 76°40'22.0"W) ECU19618; Guayas: Guayaquil (2°15'34.1"S, 79°54'18.6"W) ECU18872; El Oro: Machala (3°14'56.7"S, 79°57'41.8"W) ECU17814; Esmeraldas: Borbón (1°05'24.4"N, 78°59'32.4"W) ECU28266. (E, W).

67. *Aedes* (*Ochlerotatus*) *serratus* (Theobald, 1901).

Synonyms. *Ae. meridionalis* Dyar & Knab, 1906; *Cx. mathisi* Neveu-Lemaire, 1902; *Cx. serratus* Theobald, 1901.

Distribution. Orellana: Yasuní National Park, Tiputini Biodiversity Station, Guacamayo Trail, 2,300 m a.s.l (00°38'02.4"S, 076°09'49.9"W); Orellana (formerly Napo): Coca, confluence of Coca and Napo rivers, 250 m a.s.l. (0°28'00.0"S, 76°58'00.0"W); Orellana (formerly Napo), ~ 50 km E of El Coca, "Isla Pompeya" (00°26'12"S, 076°37'07.5"W) (Heinemann and Belkin 1979; GBIF-Secretariat 2025); Orellana: Yasuní National Park, Tiputini Biodiversity Station, Guacamayo Trail, 2,300 m a.s.l. (0°38'2.42"S, 76°9'49.87"W) (Linton et al. 2013). INSPI collection—Sucumbíos: Shushufindi (0°10'55.4"S, 76°37'32.0"W) ECU19595; Manabí: Manta (1°07'12.6"S, 80°50'33.1"W) ECU10621; Esmeraldas: Borbón (1°05'24.4"N, 78°59'32.4"W) ECU27768. (E, W).

68. *Aedes* (*Ochlerotatus*) *taeniorhynchus* (Wiedemann, 1821).

Synonyms. *Ae. epinolus* Dyar & Knab, 1914; *Ae. niger* Giles, 1904; *Ae. pix* Martini, 1935; *Cx. damnosus* Say, 1823; *Cx. portoricensis* Ludlow, 1905; *Cx. taeniorhynchus* Wiedemann, 1821.

Distribution. Guayas: Guayaquil; Durán; Posorja (Campos 1922, 1925); Guayas: Guayaquil, ~ 5 km on road to Esclusa Guayas-Salado, 2.3 km E of road to Puerto Nuevo; 10 km W of Guayaquil on Rt. 3; NW outskirts of Los Ceibos; Estero Salado just NW of Catholic University of Santiago de Guayaquil (Heinemann and Belkin 1979; GBIF-Secretariat 2025); Guayas: Guayaquil, three specimens caught in a plane flying from Guayaquil to Baltra, Galápagos (Bataille et al. 2009); Guayas: Playas, 0.5 km N of Playas (2°37'36.66"S, 80°23'25.84"W), 7 km SE of Playas on road to Posorja (2°40'52.00"S, 80°21'16.20"W) (GBIF-Secretariat 2025); Galápagos: Santa Cruz, Baltra, San Cristobal, Fernandina, Floreana, Isabela, Santiago, Española, Santa Fe (Stone et al. 1959; Whiteman et al. 2005; Bataille et al. 2009, 2012; Siers et al. 2010; Eastwood et al. 2013). INSPI collection—Guayas: Guayaquil (2°15'33.5"S, 79°54'18.6"W) ECU18888; El Oro: Machala (3°14'49.7"S, 79°57'44.0"W) ECU17224; Galápagos: San Cristobal (0°54'35.6"S, 89°35'36.8"W) ECU12903; Isabela (0°51'22.0"S, 91°01'32.1"W) ECU12580; Esmeraldas: Rioverde (1°03'38.6"N, 79°22'20.9"W) ECU8411; Esmeraldas: Borbón (1°05'24.4"N, 78°59'32.4"W) ECU28265. (W, G).

69. *Aedes* (*Protomacleaya*) *argyrothorax* Bonne-Wepster & Bonne, 1920.

Distribution. Orellana: Yasuní National Park, Tiputini Biodiversity Station (00°38'13.5"S, 076°09'0.3"W) (Linton et al. 2013; GBIF-Secretariat 2025). INSPI collection—Sucumbíos: Shushufindi (0°10'45.8"S, 76°39'03.6"W) ECU11005. Manabí: Rocafuerte (0°55'25.1"S, 80°28'09.1"W) ECU1097. (E).

70. *Aedes* (*Protomacleaya*) *metoecopus* Dyar, 1925†.**

Synonym. *Ae. terrens metoecopus* Levi-Castillo, 1953.

Distribution. Type locality: Guayas: Guayaquil, just S of Pascuales, at km 9.5 on Rt. 2 (02°05'01.7"S, 079°56'28.2"W); Guayas: Chongón, W of Guayaquil; Los

Ríos: Quevedo, 1 km E from Valencia (00°56'46.9"S, 079°20'10.5"W) (Stone and Knight 1956; Belkin 1968); Los Ríos, ~ 30 km SW of Quevedo, 3 km S of El Empalme, 100 m a.s.l. (01°06'12"S, 079°41'07.9"W); Los Ríos: Montalvo, 30 km E of Babahoyo, "Hacienda Mora", across river at end of main path of Montalvo (01°49'12"S, 079°31'07.8"W) (Schick 1970; GBIF-Secretariat 2025). (W).

71. *Aedes* (*Protomacleaya*) *terrens gr*. (Walker, 1856).

Synonyms. *Ae. apollo* Schick, 1970; *Cx. terrens* Walker, 1856; *Gualteria oswaldi* Lutz, 1904.

Distribution. Guayas: Bucay; Guayas: Atahualpa, ~ 15 km SE of Chanduy (Heinemann and Belkin 1979); Carchi: El Baboso (0°53'47.05"N, 78°26'34.98"W) (Navarro et al. 2015). INSPI collection—Manabí: Río Seco (1°07'39.1"S, 80°50'35.5"W) ECU10551. (W).

72. *Aedes* (*Stegomyia*) *aegypti* (Linnaeus, 1762).

Synonyms. *Cx. aegypti* Linnaeus, 1762; *Cx. albopalposus* Becker, 1908; *Cx. anguste-alatus* Becker, 1908; *Cx. annulitarsis* Macquart, 1844; *Cx. argenteus* Poiret, 1787; *Cx. augens* Wiedemann, 1828; *Cx. bancrofti* Skuse, 1889; *Cx. calopus* Meigen, 1818; *Cx. elegans* Ficalbi, 1889; *Cx. exagitans* Walker, 1856; *Cx. excitans* Walker, 1848; *Cx. fasciatus* Fabricius, 1805; *Cx. frater* Robineau-Desvoidy, 1827; *Cx. inexorabilis* Walker, 1848; *Cx. insatiabilis* Bigot, 1859; *Cx. kououpi* Brulle, 1833; *Cx. mosquito* Robineau-Desvoidy, 1827; *Cx. rossii* Giles, 1889; *Cx. taeniatus* Wiedemann, 1828; *Cx. toxorhynchus* Macquart, 1838; *Cx. viridifrons* Walker, 1848; *Duttonia alboannulis* Ludlow, 1911; *Mimeteomyia pulcherrima* Taylor, 1919; *St. atritarsis* Edwards, 1920; *Stegomyia canariensis* Pittaluga, 1905; *St. luciensis* Theobald, 1901; *St. nigeria* Theobald, 1901; *St. queenslandensis* Theobald, 1901.

Distribution. INSPI collection—widely spread all over the country, up to 1650 m a.s.l., ECU20713, ECU20767. (A, E, W, G).

73. *Aedes* (*Stegomyia*) *albopictus* (Skuse, 1894).

Synonyms. *St. nigritia* Ludlow, 1910; *St. quasinigritia* Ludlow, 1911; *St. samarensis* Ludlow, 1903.

Distribution. INSPI collection—Guayas: Guayaquil (2°09'27.8"S, 79°54'20.0"W) ECU20101 (Ponce et al. 2018); Esmeraldas: Alto Tambo (0°53'30.5"N, 78°30'07.9"W) ECU27432; Imbabura: Cachaco (0°50'01.7"N, 78°24'06.1"W) ECU21370; Orellana: El Coca (0°27'38.5"S, 76°59'33.8"W) ECU27313. (E, W).

74. *Haemagogus* (*Conopostegus*) *leucotaeniatus* (Komp, 1938).

Synonym. *Ae. leucotaeniatus* Komp, 1938.

Distribution. INSPI collection—Morona Santiago: Macuma, Wisui Biological Station (2°06'39.3"S, 77°44'21.3"W) ECU3520 (E).

75. *Haemagogus* (*Conopostegus*) *leucocelaenus* Dyar & Shannon, 1924.

Synonyms. *Ae. leucocelaenus* Dyar & Shannon, 1924; *Hg. leucomelas* Lutz, 1904.

Distribution. Guayas: Guayaquil (GBIF-Secretariat 2025); Ecuador (Navarro et al. 2013a) (E, W).

76. *Haemagogus* (*Haemagogus*) *acutisentis* Arnell, 1973†.**

Distribution. Type locality: Los Ríos: Quevedo, 1 km E from Valencia, banana and cocoa grove (00°56'46.9"S, 079°20'10.5"W); Los Ríos: Quevedo, 4 km W of Valencia; Los Ríos: Montalvo, 30 km E of Babahoyo, "Hacienda Mora", across river at end of main path of Montalvo (01°49'12"S, 079°31'07.8"W); Guayas: Guayaquil, at km 14 on Rt. 3, ~ 1 km beyond checkpoint (02°11'01"S, 080°00'14.5"W); Guayas: Guayaquil, just S of Pascuales, at km 9.5 on Rt. 2 (02°05'01.7"S, 079°56'28.2"W) (Arnell 1973; Heinemann and Belkin 1979). (W).

77. *Haemagogus* (*Haemagogus*) *albomaculatus* Theobald, 1903.

Distribution. Guayas: El Salado (Campos 1922). INSPI collection—Guayas: Progreso (2°25'03.8"S, 80°18'41.7"W) ECU16505. (W).

78. *Haemagogus* (*Haemagogus*) *anastasionis* Dyar, 1921.

Synonym. *Hg. dominguezi* Duret, 1971.

Distribution. Zamora Chinchipe: Copalinga (04°05'26"S, 078°57'28.8"W). INSPI collection—Esmeraldas: Río Verde (1°02'54.0"N, 79°25'00.8"W) ECU19650. Sucumbíos: Nueva Loja (0°10'56.2"N, 76°38'51.1"W) ECU18575. Manabí: Montecristi (1°07'25.0"S, 80°50'43.9"W) ECU11423. Zamora Chinchipe: Copalinga (4°02'27.5"S, 78°59'16.4"W) ECU6101. (E, W).

79. *Haemagogus* (*Haemagogus*) *boshelli* Osorno-Mesa, 1944.

Synonym. *Hg. garciai* Levi-Castillo, 1955.

Distribution. Esmeraldas: Isla de Changuaral (01°22'52.3"N, 078°52'02.1"W) (Heinemann and Belkin 1979). (W).

80. *Haemagogus* (*Haemagogus*) *chalcospilans* Dyar, 1921.

Note. Described as *Haemagogus* (*Osomomysa*) *garciai* (Levi-Castillo, 1955).

Distribution. Guayas: Guayaquil, at km 10 on Rt. 3, patch of bamboo at the back of a farm (02°11'32.6"S, 079°58'05"W); Cañar: Cochancay, at km 86 on Rt. 8 from Guayaquil (02°28'08.4"S, 079°17'50.6"W); Esmeraldas: Isla de Changuaral, Bahía de Ancón de Sardinas (GBIF-Secretariat 2025). (W).

81. *Haemagogus* (*Haemagogus*) *equinus* (Theobald, 1903).

Synonyms. *Ae. affirmatus* Dyar & Knab, 1906; *Ae. philosophicus* Dyar & Knab, 1906.

Distribution. Guayas: El Salado (Campos 1922). INSPI collection—Manabí: Ayampe (1°40'46.2"S, 80°48'13.4"W) ECU13549; Chimborazo: Cumandá (2°12'39.8"S, 79°08'00.3"W) ECU20080. (W).

82. *Haemagogus* (*Haemagogus*) *janthinomys* Dyar, 1921.

Synonyms. *Hg. falco* Kumm & Osorno-Mesa, 1946; *Hg. obscurescens* Martini, 1931; *Hg. petrocchiae* Martinez & Carcavallo, 1961.

Distribution. Orellana (formerly Napo): Coca, confluence of Coca and Napo rivers, 250 m a.s.l. (0°28'00.0"S, 76°58'00.0"W); Orellana: Yasuní National Park, near Lago Tiputini Biodiversity Station (00°38'08.2"S, 076°09'53.5"W) (Linton et al. 2013). INSPI collection—Napo: Tena (1°01'21.4"S, 77°34'31.2"W) ECU10706. (E).

83. *Haemagogus* (*Haemagogus*) *lucifer* (Howard, Dyar & Knab, 1913).

Synonym. *Stegoconops lucifer* Howard, Dyar & Knab, 1912.

Distribution. Napo: Ila (formerly Napo-Pastaza) (Arnell 1973). (E).

84. *Haemagogus* (*Haemagogus*) *panarchys* Dyar, 1921†.**

Distribution. Type locality: Guayas: Guayaquil, El Salado (02°10'43.6"S, 79°54'15.2"W) (Stone et al. 1959; Belkin 1968); Guayas: Guayaquil, at km 14 on Rt. 3, ~ 1 km beyond checkpoint (02°11'01"S, 080°00'14.5"W); Guayas: Guayaquil, just S of Pascuales, at km 9.5 on Rt. 2 (02°05'01.7"S, 079°56'28.2"W); Los Ríos: Quevedo, 4 km W of Valencia (00°57'56.7"S, 079°25'14.5"W); Santa Elena (formerly Guayas): Chanduy, ~ 15 km SE of Atahualpa (Arnell 1973; Heinemann and Belkin 1979). (W).

85. *Haemagogus* (*Haemagogus*) *soperi* Leví-Castillo, 1955†.**

Distribution. Type locality: Los Ríos: Juan Montalvo (Levi-Castillo 1955a; Stone et al. 1959; Forattini 1965); Cañar: Cochancay, at km 86 on Rt. 8 from Guayaquil (02°28'08.4"S, 079°17'50.6"W); Los Ríos: Montalvo, 30 km E of Babahoyo, “Hacienda “Mora”, across river at end of main path of Montalvo (01°49'12"S, 079°31'07.8"W); Los Ríos, ~ 30 km SW of Quevedo, 3 km S of El Empalme, 100 m a.s.l. (01°06'12"S, 079°41'07.9"W); Los Ríos: Quevedo, 1 km E from Valencia. (00°56'46.9"S, 079°20'10.5" W) (Arnell 1973; Heinemann and Belkin 1979; GBIF-Secretariat 2025). (W).

86. *Haemagogus* (*Haemagogus*) *spegazzinii* Brèthes, 1912.

Synonyms. *Hg. lindneri* Martini, 1931; *Hg. uriartei* Shannon & Ponte, 1927.

Distribution. Ecuador (Arnell 1973).

87. *Psorophora* (*Grabhamia*) *cingulata* Fabricius, 1805.

Synonyms. *Ae. garciai* Levi-Castillo, 1953; *Cx. apicalis* Theobald, 1903; *Cx. cingulatus* Fabricius, 1805; *Janthinosoma indoctum* Dyar & Knab, 1906; *Ps. neoapicalis* Theobald, 1910.

Distribution. Orellana: Yasuní National Park, Tiputini Biodiversity Station, Tower (0°39'52.99"S, 76°12'54.00"W); Orellana (formerly Napo): Coca, confluence of Coca and Napo rivers, 250 m a.s.l. (0°28'00.0"S, 76°58'00.0"W); Orellana (formerly Napo), ~ 50 km E of El Coca, “Isla Pompeya” (00°26'12"S,

076°37'07.5"W); Orellana (formerly Napo): Yasuní National Park, Tiputini Biodiversity Station, Tower (00°38'17"S, 076°08'42"W) (Linton et al. 2013). INSPI collection— Sucumbíos: Nueva Loja (0°01'57.6"S, 76°35'45.3"W) ECU20510. Imbabura: Lita, Chuchubí (0°52'07.6"N, 78°27'04.3"W) ECU10698. (E, W).

88. *Psorophora* (*Grabhamia*) *confinnis* (Lynch Arribalzaga, 1891).

Synonyms. *Cx. scutipunctatus* Lutz & Neiva, 1911; *Ps. chiquitana* Pinto, 1932; *Ps. funiculus* Dyar, 1920; *Taeniorhynchus confinnis* Lynch Arribalzaga, 1891; *Taeniorhynchus trigonophorus* Lutz, 1928.

Distribution. Imbabura: Lita (0°52'11.83"N, 78°27'05.56"W); Cachaco (0°49'41.2"N, 78°24'03.6"W) (Navarro et al. 2015). INSPI collection— Esmeraldas: Alto Tambo (1°17'18.0"N, 78°50'13.0"W) ECU3771. (W).

89. *Psorophora* (*Grabhamia*) *dimidiata* Cerqueira, 1943.

Distribution. Napo: Tena (peninsula known as PALI) (0°59'44.45"S, 77°49'07.31"W) (Jacome et al. 2023). INSPI collection—Morona Santiago: Macas (2°19'28.34"S, 78°7'56.86"W) ECU7206. Sucumbíos: Nueva Loja (0°5'20.00"S, 76°52'9.00"W) ECU3185. Sucumbíos: Shushufindi (0°7'26.46"S, 76°39'2.61"W) ECU9828. (E).

90. *Psorophora* (*Janthinosoma*) *albigenu* Peryassú, 1908.

Synonyms. *Jan. albigenu* Peryassú, 1908; *Jan. paraguayensis* Strickland, 1911; *Ps. bruchi* Petrocchi, 1927.

Distribution. Orellana (formerly Napo): Yasuní National Park, Tiputini Biodiversity Station, Tower (00°38'17"S, 076°08'42"W); Guacamayo Trail, 2,300 m a.s.l. (0°38'2.42"S, 76°9'49.87'W) (Linton et al. 2013). (E).

91. *Psorophora* (*Janthinosoma*) *albipes* (Theobald, 1907).

Synonym. *Jan. albipes* Theobald, 1907.

Distribution. Sucumbíos (formerly Napo): Cuyabeno, 50 km W of Tarapoa, Topography Camp, Aguas Negras; Orellana (formerly Napo): Coca, confluence of Coca and Napo rivers, 250 m a.s.l. (0°28'00.0"S, 76°58'00.0"W) (Heinemann and Belkin 1979); Orellana: Yasuní National Park, Tiputini Biodiversity Station, Main Camp (0°38'13.51"S, 76°09'0.32"W) (Linton et al. 2013); Imbabura: Lita (0°52'11.83"N, 78°27'05.56"W); Cachaco (0°49'41.19"N, 78°24'03.55"W); Esmeraldas: San Francisco de Bogotá (01°09'21.98"N, 78°40'17.98"W) (Navarro et al. 2015). INSPI collection—Sucumbíos: Shushufindi (0°10'55.4"S, 76°37'32.0"W) ECU19592; Esmeraldas, Eloy Alfaro, Borbón (1°05'07.0"N, 79°00'11.7"W) ECU25591. (E, W).

92. *Psorophora* (*Janthinosoma*) *cyanescens* (Coquillett, 1902).

Synonyms. *Cx. cyanescens* Coquillett, 1902; *Ps. purpurascens* Edwards, 1922; *Ps. tovari* Evans, 1922.

Distribution. Napo, Orellana, and Pastaza (formerly Napo-Pastaza) (Levi-Castillo 1952b, 1953d); Ecuador (Levi-Castillo 1958). (E).

93. *Psorophora* (*Janthinosoma*) *ferox* (Humboldt, 1819) †.

Synonyms. *Ae. pazosi* Pazos, 1908; *Cx. ferox* Humboldt, 1819; *Cx. posticatus* Wiedemann, 1821; *Cx. musicus* Say, 1829; *Jan. centrale* Brèthes, 1910; *Jan. coquilletti* Theobald, 1907; *Jan. echinata* Grabham, 1906; *Jan. jamaicensis* Theobald, 1907; *Jan. terminalis* Coquillett, 1906; *Jan. vanhalli* Dyar & Knab, 1906; *Ps. sayi* Dyar & Knab, 1906; *Ps. sayi* Theobald, 1907.

Distribution. Type locality: Guayas: flooded Guayaquil River valley near "Borodon", most likely refers to Samborondón (Stone et al. 1959; Belkin 1968); Guayas: 12 km W of Guayaquil on Rt. 3; Guayas: Samborondón, La Bocana estuary, road upstream from town (01°57'12"S, 079°44'7.9"W); Los Ríos, ~ 30 km SW of Quevedo, 3 km S of El Empalme, 100 m a.s.l. (01°06'12"S, 079°41'07.9"W); Esmeraldas; Napo-Pastaza; Orellana (formerly Napo): Coca, confluence of Coca and Napo rivers, 250 m a.s.l. (0°28'00.0"S, 76°58'00.0"W) (Heinemann and Belkin 1979). INSPI collection—Pastaza, Puyo (1°28'38.5"S, 77°59'54.7"W) ECU2955; Sucumbíos: Shushufindi (0°10'55.4"S, 76°37'31.8"W) ECU19593. (E, W).

94. *Psorophora* (*Janthinosoma*) *lanei* Shannon & Cerqueira, 1943.

Distribution. Orellana (formerly Napo): Coca, confluence of Coca and Napo rivers, 250 m a.s.l. (0°28'00.0"S, 76°58'00.0"W) (Heinemann and Belkin 1979; GBIF-Secretariat 2025); Orellana (formerly Napo): Yasuní National Park, Tiputini Biodiversity Station, Tower (00°38'17"S, 076°08'42"W) (Linton et al. 2013). (E).

95. *Psorophora* (*Janthinosoma*) *lutzii* (Theobald, 1901).

Synonyms. *Jan. lutzii* Theobald, 1901; *Ps. chaquensis* Paterson & Shannon, 1927.

Distribution. Orellana (formerly Napo): ~ 50 km E of El Coca, "Isla Pompeya" (00°26'12"S, 076°37'07.5"W); Orellana (formerly Napo): Coca, confluence of Coca and Napo rivers, 250 m a.s.l. (00°28'12"S, 076°58'07.5"W) (Heinemann and Belkin 1979; GBIF-Secretariat 2025). (E).

96. *Psorophora* (*Psorophora*) *ciliata* (Fabricius, 1794).

Synonyms. *Cx. ciliata* Fabricius, 1794; *Cx. cyanopennis* Humboldt, 1819; *Cx. molestus* Wiedemann, 1820; *Cx. nubilus* Robineau-Desvoidy, 1827; *Cx. tibialis* Robineau-Desvoidy, 1827; *Ps. boscii* Robineau-Desvoidy, 1827; *Ps. ctites* Dyar, 1918; *Ps. lynchi* Brèthes, 1916.

Distribution. Orellana (formerly Napo): Coca, confluence of Coca and Napo rivers, 250 m a.s.l. (0°28'00.0"S, 76°58'00.0"W) (GBIF-Secretariat 2025). INSPI collection—Sucumbíos: Shushufindi ECU10703; Manabí: Pacoche (1°04'14.6"S, 80°51'02.9"W) ECU10665. (E, W).

97. *Psorophora* (*Psorophora*) *cilipes* (Fabricius, 1805).

Synonyms. *Cx. cilipes* Fabricius, 1805; *Ps. iracunda* Dyar & Knab, 1906; *Sabethes scintillans* Walker, 1848.

Distribution. Orellana (formerly Napo): Coca, confluence of Coca and Napo rivers, 250 m a.s.l. (0°28'00.0"S, 76°58'00.0"W) (Heinemann and Belkin 1979). INSPI collection—Napo: Tena, Jatún Sacha Station (1°04'01.1"S, 77°35'53.3"W) ECU3512; Sucumbíos: Shushufindi (0°12'39.2"S, 76°36'58.3"W) ECU19509. (E).

98. *Psorophora* (*Psorophora*) *holmbergii* Lynch Arribalzaga, 1891.

Synonym. *Ps. agoggylia* Dyar, 1922.

Distribution. INSPI collection—Sucumbíos: Pacayacu (0°02'03.0"S, 76°35'30.7"W) ECU12276. (NR, E).

99. *Psorophora* (*Psorophora*) *lineata* (Humboldt, 1819).

Synonym. *Ps. blanchardi* Surcouf & Gonzalez-Rincones, 1911.

Distribution. Orellana (formerly Napo): Coca, confluence of Coca and Napo rivers, 250 m a.s.l. (0°28'00.0"S, 76°58'00.0"W) (Heinemann and Belkin 1979). (E).

100. *Psorophora* (*Psorophora*) *pallescens* Edwards, 1922.

Distribution. Ecuador (AFPMB 1998).

Tribe Culicini (87 species)

101. *Culex* (*Aedinus*) *accelerans* Root, 1927.

Synonym. *Cx. paraplesia* Dyar, 1922.

Distribution. INSPI collection—Sucumbíos: Shushufindi (00°11'32.64"S, 76°37'48.87"W) ECU3227. (NR, E).

102. *Culex* (*Aedinus*) *amazonensis* (Lutz, 1905).

Synonyms. *Ads. amazonensis* Lutz, 1905; *Cx. hildebrandi* Evans, 1923; *Eubonnea tapena* Dyar, 1919.

Distribution. Orellana (formerly Napo): ~ 50 km E of El Coca, “Isla Pompeya” (00°26'12"S, 076°37'07.5"W) (GBIF-Secretariat 2025); Los Ríos: Babahoyo (01°48'10.1"S, 079°31'51.6"W) (Berlin and Belkin 1980); Sucumbíos (formerly Napo): Cuyabeno, Tarapoa, 300 m a.s.l. (00°07'21.2"S, 076°20'45.9"W) (Heinemann and Belkin 1979). (E, W).

103. *Culex* (*Anoedioporpa*) *bamborum* Rozeboom & Komp, 1948.

Distribution. Orellana: Yasuní National Park, near Tiputini River, ~ 8 km from Tiputini Biodiversity Station (00°39'53"S, 076°12'54"W) (Linton et al. 2013). (E).

104. *Culex* (*Anoedioporpa*) *browni* Komp, 1936.

Distribution. Sucumbíos (formerly Napo): Cuyabeno, Tarapoa, 300 m a.s.l. (00°07'21.2"S, 076°20'45.9"W) (Berlin and Belkin 1980); Orellana:

Yasuní National Park, Tiputini Biodiversity Station, Lago Trail, 2,000 m a.s.l. (0°38'15.54"S, 76°9'51.82"W); near Río Tiputini, ~ 8 km from Tiputini Biodiversity Station (00°39'53"S, 076°12'54"W) (Linton et al. 2013). INSPI collection—Esmeraldas: Palestina (1°01'25.8"N, 79°25'45.9"W) ECU19158 (E, W).

105. *Culex* (*Anoedioporpa*) *conservator* Dyar & Knab, 1906.

Synonyms. *Cx. bifoliata* Dyar, 1922; *Cx. divisior* Dyar & Knab, 1906; *Cx. paganus* Evans, 1923; *Cx. surukumensis* Anduze, 1941.

Distribution. Sto. Domingo de los Tsáchilas: Reserva La Perla (00°01'53"S, 79°24'04"W) (GBIF-Secretariat 2025); Orellana, Yasuní National Park, Tiputini Biodiversity Station, Murciélago Trail, 250 m a.s.l. (0°38'13.50"S, 76°8'38.08"W), Lago Trail, 2,000 m a.s.l. (00°38'15.5"S, 076°09'51.8"W) (Linton et al. 2013). INSPI collection— Guayas: Guayaquil ECU20063. (E, W).

106. *Culex* (*Anoedioporpa*) *originator* Gordon & Evans, 1922.

Distribution. Ecuador (Levi-Castillo 1958).

107. *Culex* (*Carrollia*) *babahoyensis* Levi-Castillo, 1953†.

Distribution. Type locality: Los Ríos: Juan Montalvo, "Hacienda Mora" (Levi-Castillo 1953f, 1953a; Stone et al. 1959); Los Ríos: Montalvo, 30 km E of Babahoyo, "Hacienda Mora", across river at end of main path of Montalvo (01°49'12"S, 079°31'07.8"W); Los Ríos: Quevedo, 1 km E from Valencia (00°56'46.9"S, 079°20'10.5"W); Los Ríos, ~ 30 km SW of Quevedo, 3 km S of El Empalme, 100 m a.s.l. (01°06'12"S, 079°41'07.9"W) (Levi-Castillo 1953c; Heinemann and Belkin 1979; GBIF-Secretariat 2025); Orellana: Loreto, Bigal River (00°32'11.4"S, 077°25'29"W). INSPI collection—Sucumbíos: Nueva Loja (0°04'30.3"N, 77°13'03.2"W) ECU19837; Sucumbíos: Shushufindi (0°10'53.4"S, 76°37'31.9"W) ECU19631; Orellana, Loreto, Bigal River (0°31'08.0"S, 77°25'40.4"W) ECU10729. (E, W).

108. *Culex* (*Carrollia*) *bihaicolus* Dyar & Núñez Tovar, 1927.

Distribution. Los Ríos: Quevedo, 1 km E from Valencia, 200 m a.s.l. (00°56'46.9"S, 079°20'10.5"W) (Heinemann and Belkin 1979); Sto. Domingo de los Tsáchilas: Valle Hermoso, at km 24 on the Quinidé-Esmeraldas highway (00°05'10"S, 079°16'21"W) (GBIF-Secretariat 2025); Esmeraldas: Quinindé; Los Ríos: Balzar (00°19'33.2"N, 079°27'58"W) (Valencia 1973). (W).

109. *Culex* (*Carrollia*) *bonnei* Dyar, 1921.

Distribution. Orellana (formerly Napo), ~ 50 km E of El Coca, "Isla Pompeya" at confluence with Jivino River (00°26'12"S, 076°37'07.5"W) (Valencia 1973); Orellana: Yasuní National Park, Tiputini Biodiversity Station, Lago trail, 1,500 m a.s.l. (00°38'15.5"S, 076°09'51.8"W); Main Camp (0°38'13.51"S, 76°9'0.32"W) (Linton et al. 2013); Esmeraldas: San Francisco de Bogotá (01°09'21.98"N,

78°40'17.98"W) (Navarro et al. 2015). INSPI collection—Esmeraldas, Rioverde (1°04'28.3"N, 79°24'39.3"W) ECU19654. (E, W).

110. *Culex* (*Carrollia*) *infoliatus* Bonne-Wepster & Bonne, 1920.

Distribution. Pastaza (formerly Napo-Pastaza): Puyo (Valencia 1973). INSPI collection—Orellana, Loreto, Bigal River (0°31'08.0"S, 77°25'40.4"W) ECU10723. (E).

111. *Culex* (*Carrollia*) *irridescens* Lutz, 1905.

Synonym. *Car. iridescens* Lutz, 1905.

Distribution. Orellana: Yasuní National Park, Tiputini Biodiversity Station, Maquisapa Trail, 6,200 m a.s.l. (00°37'54.9"S, 076°09'58.4"W) (Linton et al. 2013). (E).

112. *Culex* (*Carrollia*) *metempsytus* Dyar, 1921.

Distribution. Napo, Pastaza, and Orellana (formerly Napo-Pastaza); Morona Santiago and Zamora Chinchipe (formerly Santiago-Zamora) (Levi-Castillo 1958). (E).

113. *Culex* (*Carrollia*) *secundus* Bonne-Wepster & Bonne, 1920.

Distribution. Orellana: Tiputini Biodiversity Station, Tiputini River, 6 km from Tiputini Biodiversity Station (0°39'50.00"S, 76°12'56.01"W) (Linton et al. 2013). (E).

114. *Culex* (*Carrollia*) *urichii* (Coquillett, 1906).

Synonyms. *Cx. mathesoni* Anduze, 1942; *Melanoconion urichii* Coquillett, 1906.

Distribution. Orellana: Yasuní National Park, Tiputini Biodiversity Station, Harpía Trail, 100 m a.s.l. (0°38'13.5"S, 76°09'00.3"W); Murciélago Trail, 250 m a.s.l. (0°38'13.50"S, 76°8'38.08"W); Lake ~ 4 hectares (00°38'13.51"S, 76°09'0.31"W); Lago Trail, 1,700 m a.s.l. (0°38'14.12"S, 76°9'43.74"W); Lago Trail, 1,500 m a.s.l. (0°38'14.98"S, 76°9'37.53"W) (Linton et al. 2013). (E).

115. *Culex* (*Carrollia*) *wilsoni* Lane & Whitman, 1943.

Distribution. Orellana: Yasuní National Park, Tiputini Biodiversity Station, Maquisapa Trail, 6,300 m a.s.l. (00°37'54.9"S, 076°09'58.3"W) (Linton et al. 2013). (E).

116. *Culex* (*Culex*) *archegus* Dyar, 1929.

Distribution. Pichincha: Quito (Bram 1967); Azuay: Cuenca (Levi-Castillo 1953c; Stone et al. 1959); Ecuador (AFPMB 1998; Bánki et al. 2025). (A).

117. *Culex* (*Culex*) *articularis* Philippi, 1865.

Distribution. Azuay; Cañar; Chimborazo; Loja (Levi-Castillo 1953c); Ecuador (Levi-Castillo 1958; AFPMB 1998). (A).

118. *Culex* (*Culex*) *bonnei* Dyar & Knab, 1919.

Distribution. Orellana (formerly Napo): Coca, confluence of Coca and Napo rivers, 250 m a.s.l. (0°28'00.0"S, 76°58'00.0"W) (Heinemann and Belkin 1979). (E).

119. *Culex* (*Culex*) *camposi* Dyar, 1925†.

Synonym. *Cx. coronator camposi*, resurrected from syn *coronator* Bram, 1967.

Distribution. Type locality: Los Ríos, Quevedo, ~ 10 km SW of Quevedo, Pichilingue, 100 m a.s.l. (Heinemann and Belkin 1979); Orellana: Near Tiputini River ~ 8 km from Tiputini Biodiversity Station (0°39'53.00"S, 76°12'54.00"W) (Linton et al. 2013). (E, W).

120. *Culex* (*Culex*) *chidesteri* Dyar, 1921.

Synonyms. *Cx. deanei* Correa & Ramalho, 1959; *Cx. finlayi* Perez Vigueras, 1956.

Distribution. INSPI collection—Manabí: Pacoche ECU12425; Napo: Jatun Sacha (1°05'11.3"S, 77°37'02.0"W) ECU3497. (E).

121. *Culex* (*Culex*) *coronator* Dyar & Knab, 1906.

Synonym. *Cx. mooseri* Vargas & Martinez Palacios, 1954.

Distribution. Guayas: Guayaquil; Durán (Campos 1922, 1925); Zamora Chinchipe: Zamora, ~ 10 km NE of tributary stream of Zamora River; Sucumbíos (formerly Napo): Cuyabeno, ~ 50 km of "Tarapoa (Main Camp)"; Cuyabeno, ~ 50 km W of "Tarapoa, Aguarico 3, Contrasa"; Cuyabeno, ~ 50 km W of "Tarapoa, Campsite 5.5 km N" (Heinemann and Belkin 1979). Orellana: Yasuní National Park: near Tiputini River ~ 8 km from Tiputini Biodiversity Station (00°39'53"S, 076°12'54"W); Main Camp (0°38'13.52"S, 76°9'0.33"W) (Linton et al. 2013). INSPI collection—Pichincha: Caoni (0°00'47.6"N, 79°10'22.7"W) ECU14922; Manabí: Portoviejo (1°04'09.8"S, 80°29'55.5"W) ECU7120; Napo: Jatun Sacha (1°05'11.3"S, 77°37'02.0"W) ECU3419. (E, W).

122. *Culex* (*Culex*) *declarator* Dyar & Knab, 1906.

Synonyms. *Cx. dictator* Dyar & Knab, 1909; *Cx. forattinii* Correa & Ramalho, 1959; *Cx. inquisitor* Dyar & Knab, 1906; *Cx. jubilator* Dyar & Knab, 1907; *Cx. proclamator* Dyar & Knab, 1906; *Cx. revelator* Dyar & Knab, 1907; *Cx. vindicator* Dyar & Knab, 1909.

Distribution. Guayas: Chongón, 24 km W of Guayaquil on Rt. 3 near road to Chongón (02°13'10.5"S, 080°05'05.8"W); Guayaquil, 10 km W on Rt. 3; Esmeraldas: near Atacames (00°52'36"N, 79°50'46.3"W); Orellana: Tarapoa, ~ 50 km W of Cuyabeno (00°07'21.2"S, 076°20'45.9"W) (Heinemann and Belkin 1979). INSPI collection—Manabí: Pacoche ECU12427. (E, W).

123. *Culex* (*Culex*) *dolosus* (Lynch Arribálzaga, 1891).

Synonyms. *Cx. bilineatus* Theobald, 1903; *Cx. bonariensis* Brèthes, 1916; *Heteronycha dolosus* Lynch Arribalzaga, 1891.

Distribution. Ecuador (Stone et al. 1959; Bram 1967; AFPMB 1998; Bánki et al. 2025).

124. *Culex* (*Culex*) *guayasi* Levi-Castillo, 1953†. Unrecognized species (Bram 1967).**

Distribution. Type locality: Babahoyo, Los Ríos (01°48'55.5"S, 079°31"00"W) (Levi-Castillo 1953c, 1953c; GBIF-Secretariat 2025); Ecuador (Levi-Castillo 1958). (W).

125. *Culex* (*Culex*) *levicastilloi* Lane, 1945†.

Synonym. *Cx. tejerai* Cova García, 1962.

Distribution. Type locality: Imbabura, Ibarra, just NE of Laguna de Yahuarcocha, 1,950 m a.s.l. (00°22'46.2"N, 078°05'22.7"W) (Heinemann and Belkin 1979; GBIF-Secretariat 2025). (A).

126. *Culex* (*Culex*) *maracayensis* Evans, 1923.

Synonym. *Cx. aglischrus* Dyas, 1924.

Distribution. Ecuador (Levi-Castillo 1958).

127. *Culex* (*Culex*) *mollis* Dyar & Knab, 1906.

Synonyms. *Cx. elocutilis* Dyar & Knab, 1909; *Cx. equivocator* Dyar & Knab, 1907; *Cx. lateropunctata* Theobald, 1907; *Cx. lepostenis* Dyar, 1923; *Cx. tisseuli* Senevet, 1937.

Distribution. Orellana: Yasuní National Park, Tiputini Biodiversity Station, near Lake (0°38'13.51"S, 76°9'0.32"W); Lago Trail, 2,000 m a.s.l. (0°38'15.54"S, 76°9'51.79"W); Lago Trail, 1,700 m a.s.l. (0°38'14.13"S, 76°9'43.83"W); Lago Trail, 1,500 m a.s.l. (0°38'14.98"S, 76°9'37.53"W); Main Camp (0°38'13.52"S, 76°9'0.33"W); Numa Trail (0°38'15.50"S, 76°8'59.31"W); Chorongo Trail (0°38'11.18"S, 76°8'55.67"W) (Linton et al. 2013); Sto. Domingo de los Tsáchilas (formerly Pichincha): Reserva La Perla (00°01'03"S, 079°23'47"W); Orellana (formerly Napo): Coca, confluence of Coca and Napo rivers, 250 m a.s.l. (0°28'00.0"S, 76°58'00.0"W) (Heinemann and Belkin 1979). INSPI collection—Esmeraldas: Borbón ECU27968. (E, W).

128. *Culex* (*Culex*) *nigripalpus* Theobald, 1901.

Synonyms. *Cx. azuayus* Levi-Castillo, 1954; *Cx. biocellatus* Theobald, 1903; *Cx. caraibeus* Howard, Dyar & Knab, 1912; *Cx. carmodyae* Dyar & Knab, 1906; *Cx. factor* Dyar & Knab, 1906; *Cx. microsquamosus* Theobald, 1905; *Cx. mortificator* Dyar & Knab, 1906; *Cx. palus* Theobald, 1903; *Cx. prasinopleurus* Martini, 1914; *Cx. proximus* Dyar & Knab, 1909; *Cx. regulator* Dyar & Knab, 1906; *Cx. similis* Theobald, 1903; *Trichopronomyia microannulata* Theobald, 1907.

Distribution. Guayas: Chongón, 24 km W of Guayaquil on Rt. 3 near road to Chongón (02°13'10.5"S, 080°05'05.8"W); Guayas: Guayaquil, 10 km W of Guayaquil on Rt. 3 (2°11'20.69"S, 79°57'56.99"W); Guayas: Guayaquil, airport

(2°9'42.79"S, 79°53'5.73"W); Manabí: Manta; Guayas: Guayaquil, Febres Cordero (2°12'2.89"S, 79°54'55.69"W); Guayas: Guayaquil, Atarazana (2°10'47.92"S, 79°53'5.68"W) (Heinemann and Belkin 1979; GBIF-Secretariat 2025); Sto Domingo de los Tsáchilas: Reserva La Perla (0°1'3.00"S, 79°23'47.00"W); Orellana (formerly Napo): Coca, confluence of Coca and Napo rivers, 250 m a.s.l. (0°28'00.0"S, 76°58'00.0"W) (GBIF-Secretariat 2025). INSPI collection—Sucumbíos: Shushufindi (0°10'19.6"S, 76°38'18.7"W) ECU14855; (Sucumbíos: Nueva Loja) (0°06'04.2"N, 76°52'47.8"W) ECU14114; Manabí: Santa Ana (1°09'16.0"S, 80°16'59.8"W) ECU13696; Manabí: Bahía de Caráquez (0°38'33.5"S, 80°24'36.0"W) ECU13667; Manabí: Río Seco (1°07'37.5"S, 80°50'33.0"W) ECU10581; Pichincha: Sangolquí (0°21'18.9"S, 78°25'29.8"W) ECU13554; Napo: Jatun Sacha (1°05'11.3"S, 77°37'02.0"W) ECU3484. (E, W).

129. *Culex* (*Culex*) *quinquefasciatus* Say, 1823.

Synonyms. *Cx. acer* Walker, 1848; *Cx. aestuans* Wiedemann, 1828; *Cx. aikenii* Dyar & Knab, 1908; *Cx. albolineatus* Giles, 1901; *Cx. anxifer* Bigot, 1859; *Cx. aseyehae* Dyar & Knab, 1915; *Cx. autumnalis* Weyenbergh, 1882; *Cx. barbarus* Dyar & Knab, 1906; *Cx. cartroni* Ventrillon, 1905; *Cx. christophersii* Theobald, 1907; *Cx. cingulatus* Doleschall, 1856; *Cx. cubensis* Bigot, 1857; *Cx. didieri* Neveu-Lemaire, 1906; *Cx. fatigans* Wiedemann, 1828; *Cx. fouchowensis* Theobald, 1901; *Cx. hensemaeon* Dyar, 1920; *Cx. luteoannulatus* Theobald, 1901; *Cx. macleayi* Skuse, 1889; *Cx. minor* Theobald, 1908; *Cx. nigrirostris* Enderlein, 1920; *Cx. pallidocephala* Theobald, 1904; *Cx. penafieli* Sanchez, 1885; *Cx. pungens* Wiedemann, 1828; *Cx. pygmaeus* Neveu-Lemaire, 1906; *Cx. quasilinealis* Theobald, 1907; *Cx. quasipipiens* Theobald, 1901; *Cx. raymondii* Tamayo, 1907; *Cx. reesi* Theobald, 1901; *Cx. revocator* Dyar & Knab, 1909; *Cx. sericeus* Theobald, 1901; *Cx. serotinus* Philippi, 1865; *Cx. skusii* Giles, 1900; *Cx. trillineatus* Theobald, 1901; *Cx. zeltneri* Neveu-Lemaire, 1906; *Culicelsa fuscus* Taylor, 1914.

Distribution. Guayas: Daule, ~ 10 km S of El Triunfo (01°56'12"S, 079°58'07.9"W); Guayas: Guayaquil, airport (02°09'54.7"S, 079°53'13.8"W); Orellana (formerly Napo): Coca, confluence of Coca and Napo rivers, 250 m a.s.l. (0°28'00.0"S, 76°58'00.0"W) (Heinemann and Belkin 1979; GBIF-Secretariat 2025); Galápagos Islands (restricted to human settlements): Baltra, Isabela, Santa Cruz, San Cristóbal (Whiteman et al. 2005; Bataille et al. 2009; Siers et al. 2010; Eastwood et al. 2013); Imbabura: Lita (0°52'11.83"N, 78°27'05.56"W); Cachaco (0°49'41.19"N, 78°24'03.55"W); Esmeraldas: San Francisco de Bogotá (01°09'21.98"N, 78°40'17.98"W) (Navarro et al. 2015); Cosmotropical (Stone et al. 1959). Cosmotropical (Bánki et al. 2025). INSPI collection—Guayas: Guayaquil (2°07'21.5"S, 79°58'03.6"W) ECU19978; Napo: Quijos (0°26'28.4"S, 77°52'39.9"W) ECU16353; Sucumbíos: Shushufindi (0°10'20.6"S, 76°38'04.7"W) ECU14859; Esmeraldas: Esmeraldas (0°57'07.5"N, 79°39'10.1"W) ECU13849; Pichincha: Llano Chico (0°07'55.4"S, 78°26'04.7"W) ECU13698; Imbabura: Ibarra (0°20'20.8"N, 78°07'20.0"W) ECU13153; Galápagos: Santa Cruz (0°40'11.8"S, 90°16'26.4"W) ECU12905; Galápagos: San Cristóbal (0°54'47.4"S, 89°34'44.6"W) ECU12890; Manabí: Pacoche ECU12425; Cotopaxi: Pujilí (0°56'08.9"S, 78°40'43.3"W) ECU29447; Esmeraldas: San José de Cayapas (0°51'21.2"N, 78°58'10.1"W) ECU29114. (E, W, A, G).

130. *Culex* (*Culex*) *quitensis* Levi-Castillo, 1953†. Unrecognized species (Bram 1967).**

Synonym. *Cx. nigripalpus* Bram 1967.

Distribution. Type locality: Pichincha, Quito (Levi-Castillo 1953d); Cotopaxi; Pichincha; Imbabura (Levi-Castillo 1953c); Ecuador (Levi-Castillo 1958; AFPMB 1998; Bánki et al. 2025). (A).

131. *Culex* (*Culex*) *stenolepis* Dyar & Knab, 1908.

Distribution. Pichincha: Pululahua Geobotanical Reserve, Pululahua Volcano (0°03'28.9"N, 78°30'29.1"W) (Navarro et al. 2015). (A).

132. *Culex* (*Culex*) *stigmatosoma* Dyar, 1907.

Synonyms. *Cx. eumimetes* Dyar & Knab, 1908.

Distribution. INSPI collection—Manabí: San Lorenzo, Pacoche Wildlife Refuge (1°4'14.74"S, 80°53'26.99"W) ECU12428, ECU12429, ECU12431, ECU12432. (NR, W).

133. *Culex* (*Culex*) *thriambus* Dyar, 1921.

Synonyms. *Cx. affinis* Adams, 1903; *Cx. peus* Speiser, 1904; *Cx. eumimetes* Dyar & Knab, 1908.

Distribution. Manabí: San Lorenzo, Pacoche Wildlife Refuge (1°7'38.86"S, 80°50'35.48"W) ECU10558. (NR, W).

134. *Culex* (*Culex*) *usquatissimus* Dyar, 1922.

Synonym. *Cx. coronator* Bram 1967.

Distribution. Orellana: Yasuní National Park, Tiputini Biodiversity Station (Linton et al. 2013). (E).

135. *Culex* (*Culex*) *usquatus* Dyar, 1918.

Distribution. Orellana: Yasuní National Park, Tiputini Biodiversity Station (0°39'53.00"S, 76°12'54.00"W) (Linton et al. 2013). (E).

136. *Culex* (*Melanoconion*) *adamesi* Sirivanakarn & Galindo, 1980.

Distribution. Esmeraldas: Hdq. de Jesús, Quiñónez, Quinindé (00°20'48.4"N, 079°28'35"W); Guayas: San Rafael, Tenguel (02°58'12.4"S, 079°46'20.3"W) (Sirivanakarn and Galindo 1980). (W).

137. *Culex* (*Melanoconion*) *albinensis* Bonne-Wepster & Bonne, 1920.

Synonyms. *Cx. gordoni* Evans, 1924; *Cx. maroniensis* Bonne-Wepster & Bonne, 1919.

Distribution. Ecuador (Levi-Castillo 1958).

138. *Culex* (*Melanoconion*) *bastagarius* Dyar & Knab, 1906.

Synonyms. *Cx. alfaroi* Dyar, 1921; *Cx. cuclyx* Dyar & Shannon, 1924; *Cx. innominatus* Evans, 1924; *Cx. thomasi* Evans, 1924; *Cx. vapulans* Dyar, 1920; *Cx. xivylis* Dyar, 1920.

Distribution. Pastaza: Puyo, 1.5 km S (01°28'01.4"S, 077°59'1.5"W); Napo: Tena, 13 km SW; Sto. Domingo de los Tsáchilas (formerly Pichincha): Valle Hermoso, Hostería "Valle Hermoso" (00°05'17"S, 079°16'34"W) (GBIF-Secretariat 2025). (E, W).

139. *Culex* (*Melanoconion*) *batesi* Rozeboom & Komp, 1948.

Distribution. Napo: Tena (0°59'48.0"S, 77°48'49.3"W) (Pecor et al. 1992; GBIF-Secretariat 2025). (E).

140. *Culex* (*Melanoconion*) *comatus* Senevet & Abonnenc, 1939.

Distribution. Ecuador (Levi-Castillo 1958).

141. *Culex* (*Melanoconion*) *comminutor* Dyar, 1920.

Distribution. Ecuador (Stone et al. 1959; Pecor et al. 1992; AFPMB 1998; Bánki et al. 2025).

142. *Culex* (*Melanoconion*) *conspirator* Dyar & Knab, 1906.

Synonyms. *Cx. dysmathes* Dyar & Ludlow, 1921; *Cx. fatuator* Dyar & Shannon, 1924; *Cx. holoneus* Dyar, 1935; *Cx. inducens* Root, 1928; *Cx. macaronensis* Dyar & Nunez Tovar, 1926; *Cx. merodaemon* Dyar, 1921; *Cx. meroneus* Dyar, 1925; *Cx. pasadaemon* Dyar, 1921.

Distribution. Guayas: Guayaquil, 10 km W of Rt. 3 (02°11'32.6"S, 079°58'05"W) (Heinemann and Belkin 1979). INSPI collection—Esmeraldas: Santa María de los Cayapas (0°51'24.3"N, 78°58'06.7"W) ECU28283. (W).

143. *Culex* (*Melanoconion*) *dunni* Dyar, 1918.

Synonyms. *Cx. exedrus* Root, 1927; *Cx. ruffinis* Dyar & Shannon, 1924.

Distribution. Napo: Tena, 32 km S (01°16'01.4"S, 077°49'01.5"W); Sucumbíos: Limoncocha Lake (0°23'39.8"S, 76°37'01.2"W) (GBIF-Secretariat 2025). (E).

144. *Culex* (*Melanoconion*) *distinguendus* Dyar, 1928.

Distribution. Napo, Pastaza, and Orellana (formerly Napo-Pastaza); Morona Santiago and Zamora Chinchipe (formerly Santiago-Zamora) (Levi-Castillo 1949b, 1953d); Ecuador (Levi-Castillo 1958; Pecor et al. 1992; AFPMB 1998). (E).

145. *Culex* (*Melanoconion*) *eastor* Dyar, 1920.

Synonym. *Cx. manaosensis* Evans, 1924.

Distribution. Orellana (formerly Napo): Coca, confluence of Coca and Napo rivers, 250 m a.s.l. (0°28'00.0"S, 76°58'00.0"W) (Heinemann and Belkin 1979; GBIF-Secretariat 2025); Orellana: Yasuní National Park, Tiputini Biodiversity Station, near Lake (00°38'08.2"S, 076°09'53.5"W) (Linton et al. 2013). (E).

146. *Culex* (*Melanoconion*) *educator* Dyar & Knab, 1906.

Synonyms. *Cx. aneles* Dyar & Ludlow, 1922; *Cx. apeteticus* Howard, Dyar & Knab, 1912; *Cx. bibulus* Dyar, 1920; *Cx. keenani* Galindo & Mendez, 1961.

Distribution. Los Ríos: Babahoyo, 5 km W of Babahoyo, 50 m a.s.l. (Stone et al. 1959; Heinemann and Belkin 1979). (E).

147. *Culex* (*Melanoconion*) *eknomios* Forattini & Sallum, 1992.

Distribution. Sucumbíos: Limoncocha (00°24'37.8"S, 076°37'26.4"W) (Forattini and Sallum 1992). (E).

148. *Culex* (*Melanoconion*) *elevator* Dyar & Knab, 1906.

Synonyms. *Cx. bonneti* Senevet, 1938; *Cx. curryi* Dyar, 1926; *Cx. dornarum* Dyar & Shannon, 1924; *Cx. vogelsangi* Anduze, 1948.

Distribution. Orellana: Yasuní National Park, Tiputini Biodiversity Station, Harpía Trail, 1,500 m a.s.l. (0°37'32.30"S, 76°8'52.03"W) (0°38'8.99"S, 76°9'34.99"W); Harpía Trail, 800 m a.s.l. (0°37'48.64"S, 76°8'43.81"W); Maquisapa trail, 6,300 m a.s.l. (00°37'54.9"S, 076°09'58.3"W) (Linton et al. 2013). (E).

149. *Culex* (*Melanoconion*) *ensiformis* Bonne-Wepster & Bonne, 1920.

Distribution. Sto. Domingo de los Tsáchilas (formerly Pichincha): Valle Hermoso, next to Hostería "Valle Hermoso" (00°05'17"S, 079°16'34"W) (GBIF-Secretariat 2025). (W).

150. *Culex* (*Melanoconion*) *erraticus* (Dyar & Knab, 1906).

Distribution. Guayas, Guayaquil: Entrada Atarazana (2°12'00.0"S, 79°54'00.0"W); Esmeraldas: Propicia 1 (0°54'00.0"N, 79°42'00.0"W) (GBIF-Secretariat 2025). INSPI collection—Esmeraldas: Borbón (1°05'55.4"N, 78°59'10.8"W) ECU28419. (W).

151. *Culex* (*Melanoconion*) *evansae* Root, 1927.

Distribution. Orellana (formerly Napo): ~ 50 km E of El Coca, "Isla Pompeya" (island in Napo River at confluence with Jivino River) (00°26'12"S, 076°37'07.5"W); Bigal (00°32'11.4"S, 077°25'29"W) (Heinemann and Belkin 1979; GBIF-Secretariat 2025); Orellana: Yasuní National Park, Tiputini Biodiversity Station (0°38'8.99"S, 76°9'34.96"W), Guacamayo Trail, 2,300 m a.s.l. (0°38'2.42"S, 76°9'49.87"W) (Linton et al. 2013). (E).

152. *Culex* (*Melanoconion*) *gnomatos* Sallum, Hutchings, Leila & Ferreira, 1997.

Distribution. Ecuador (AFPMB 1998).

153. *Culex* (*Melanoconion*) *inhibitator* Dyar & Knab, 1906.

Synonym. *Cx. investigator* Dyar & Knab, 1906.

Distribution. Napo, Pastaza, and Orellana (formerly Napo-Pastaza); Morona Santiago and Zamora Chinchipe (formerly Santiago-Zamora) (Levi-Castillo 1949b, 1953d); Ecuador (Levi-Castillo 1958). (E).

154. *Culex* (*Melanoconion*) *innovator* Evans, 1924.

Distribution. Ecuador (Levi-Castillo 1958).

155. *Culex* (*Melanoconion*) *iolambdis* Dyar, 1918.

Distribution. Orellana: Yasuní National Park, Tiputini Biodiversity Station, Harpía Trail, 750 m a.s.l. (00°37'50.2"S, 076°08'43.4"W) (Linton et al. 2013). (E).

156. *Culex* (*Melanoconion*) *lucifugus* Komp, 1936.

Distribution. Orellana (formerly Napo), ~ 50 km E of El Coca, "Isla Pompeya" (island in Napo River at confluence with Jivino River) (00°26'12"S, 076°37'07.5"W) (Heinemann and Belkin 1979). (E).

157. *Culex* (*Melanoconion*) *madininensis* Senevert, 1936.

Distribution. Ecuador (Levi-Castillo 1958).

158. *Culex* (*Melanoconion*) *ocossa* Dyar & Knab, 1919.

Distribution. Sucumbíos: Limoncocha (00°24'1.4"S, 076°38'1.5"W) (GBIF-Secretariat 2025). (E).

159. *Culex* (*Melanoconion*) *oedipus* Root, 1927.

Distribution. Esmeraldas: San Lorenzo (01°17'21.9"N, 078°50'9.0"W) (Pecor et al. 1992). (W).

160. *Culex* (*Melanoconion*) *paracrybda* Komp, 1936.

Distribution. Esmeraldas: on road to Muisne (00°37'35.9"N, 80°00'26.7"W) (GBIF-Secretariat 2025). (W).

161. *Culex* (*Melanoconion*) *pedroi* Sirivanakarn & Belkin, 1980.

Distribution. Orellana (formerly Napo): Coca; Esmeraldas: San Lorenzo (01°17'21.9"N, 078°50'9.0"W) (Berlin and Belkin 1980). (E, W).

162. *Culex* (*Melanoconion*) *phlogistus* Dyar, 1920.

Distribution. Los Ríos (Levi-Castillo 1953c); Ecuador (Levi-Castillo 1958). (W).

163. *Culex* (*Melanoconion*) *plectoporpe* Root, 1927.

Distribution. Ecuador (Levi-Castillo 1958).

164. *Culex* (*Melanoconion*) *penai* Sirivanakarn, 1979.

Distribution. Orellana (formerly Napo): Coca, confluence of Coca and Napo rivers, 250 m a.s.l. (0°28'00.0"S, 76°58'00.0"W) (Sirivanakarn and Galindo 1980). (E).

165. *Culex* (*Melanoconion*) *pilosus* Lee, 1946.

Synonyms. *Cx. agitator* Dyar & Knab, 1907; *Cx. colombiensis* Dyar, 1924; *Cx. curopiensis* Bonne-Wepster & Bonne, 1919; *Cx. deceptor* Dyar & Knab, 1909; *Cx. hesitator* Dyar & Knab, 1907; *Cx. ignobilis* Dyar & Knab, 1909; *Cx. mastigia* Howard, Dyar & Knab, 1912; *Cx. radiatus* Senevet & Abonnenc, 1939; *Cx. reductor* Dyar & Knab, 1909; *Mochlostyrax cubensis* Dyar & Knab, 1906; *M. floridanus* Dyar & Knab, 1906; *M. jamaicensis* Grabham, 1906; *M. pilosus* Dyar & Knab, 1906.

Distribution. Manabí "Bahía, Floresta" (Heinemann and Belkin 1979); Orellana: Yasuní National Park, Tiputini Biodiversity Station, near Tiputini River ~ 8 km from Tiputini Biodiversity Station (0°39'53.00"S, 76°12'54.00"W); Napo: Tena, 11.7 km SW (01°10'1.4"S, 077°53'1.5"W); Pastaza: Puyo, 4 km NE, (01°28'1.4"S, 077°59'1.5"W); Pastaza: Puyo, 23 km SE (01°35'01.4"S, 077°50'01.5"W); Sucumbíos (formerly Napo): Limoncocha (00°24'37.8"S, 076°37'26.4"W) (GBIF-Secretariat 2025). INSPI collection—Guayas: Guayaquil (2°09'17.1"S, 79°53'09.9"W) ECU13151. Napo: Jatun Sacha (1°05'11.3"S, 77°37'02.0"W) ECU3499. (E, W).

166. *Culex* (*Melanoconion*) *psatharus* Dyar, 1920.

Distribution. Guayas: Posorja, just S of Punta del Morro (02°44'7.2"S, 80°15'19.8"W) (Heinemann and Belkin 1979; GBIF-Secretariat 2025). (W).

167. *Culex* (*Melanoconion*) *putumayensis* Matheson, 1934.

Synonym. *Cx. cavernicola* Floch & Abonnenc, 1945.

Distribution. Orellana (formerly Napo): Coca, ~ 50 km E of "Isla Pompeya" (island in Napo River at confluence with Jivino River) (00°26'12"S, 076°37'07.5"W) (Heinemann and Belkin 1979; GBIF-Secretariat 2025). (E).

168. *Culex* (*Melanoconion*) *saramaccensis* Bonne-Wepster & Bonne, 1920.

Distribution. Napo, Pastaza, and Orellana (formerly Napo-Pastaza); Morona Santiago and Zamora Chinchipe (formerly Santiago-Zamora) (Levi-Castillo 1949b); Ecuador (Pecor et al. 1992; AFPMB 1998). (E).

169. *Culex* (*Melanoconion*) *serratimarge* Root, 1927.

Distribution. Orellana: Yasuní National Park, Tiputini Biodiversity Station, Lake ~ 4 hectares (0°38'13.52"S, 76°9'0.33"W) (Linton et al. 2013). (E).

170. *Culex* (*Melanoconion*) *spissipes* (Theobald, 1903).

Synonyms. *Cx. alvarezi* Sutil Oramas, Pulido Florenzano & Amarista Meneses, 1987; *Cx. fur* Dyar & Knab, 1907; *Cx. haynei* Komp & Curry, 1932; *Cx. menytes* Dyar, 1918; *Melanoconion spissipes* Theobald, 1903.

Distribution. Sucumbíos (formerly Napo): Cuyabeno, ~ 50 km W of Tarapoa, Campsite 800–1000 m south of the trail", 300 m a.s.l. (Heinemann and Belkin 1979). (E).

171. *Culex* (*Melanoconion*) *sursumptor* Dyar, 1924.

Synonym. *Cx. ligator* Dyar, 1924.

Distribution. Pastaza: Puyo, 16 km NE (01°23'1.4"S, 077°53'1.5"W); Sucumbíos: Limoncocha, other side of Limoncocha Lake (GBIF-Secretariat 2025). (E).

172. *Culex* (*Melanoconion*) *symbletos* Sallum & Hutchings, 2003.

Distribution. Orellana: Yasuní National Park, Tiputini Biodiversity Station, Lake ~4 hectares (0°38'13.52"S, 76°9'0.33"W) (Linton et al. 2013). (E).

173. *Culex* (*Melanoconion*) *taeniopus* Dyar & Knab, 1907.

Synonyms. *Cx. opisthopus* Komp, 1926; *Mel. annulipes* Theobald, 1907; *Cx. mychonde* Komp, 1928.

Distribution. Orellana (formerly Napo): Coca, confluence of Coca and Napo rivers, 250 m a.s.l. (0°28'00.0"S, 76°58'00.0"W) (GBIF-Secretariat 2025). (E).

174. *Culex* (*Melanoconion*) *theobaldi* (Lutz, 1904).

Synonyms. *Cx. chrysonotum* Dyar & Knab, 1908; *Mel. theobaldi* Lutz, 1904; *Neomelanoconion chrysothorax* Newstead & Thomas, 1910.

Distribution. Sucumbíos: Limoncocha (00°24'37.8"S, 076°37'26.4"W); Sucumbíos: Cuyabeno, ~ 50 km W of Tarapoa (Main Camp); Esmeraldas: La Propicia 1 (00°56'0.2"N, 079°39'28.6"W) (GBIF-Secretariat 2025); Orellana: Yasuní National Park, Tiputini Biodiversity Station, Lake ~ 4 hectares (0°38'13.52"S, 76°9'0.33"W); Tiputini River, blackwater area ~3.5 km from Tiputini Biodiversity Station (0°38'18.00"S, 76°10'55.00"W); Main Camp (0°38'13.52"S, 76°9'0.33"W) (Linton et al. 2013). INSPI collection—Esmeraldas: Borbón ECU28063. (E, W).

175. *Culex* (*Melanoconion*) *vomerifer* Komp, 1932.

Distribution. Esmeraldas: San Lorenzo, 14 km from "La Chiquita," near sea level (01°13'41.9"N078°45'55"W) (Heinemann and Belkin 1979); Orellana: Yasuní National Park, Tiputini Biodiversity Station, Main Camp (0°38'13.52"S,

76°9'0.33"W) (Linton et al. 2013). INSPI collection—Esmeraldas: Borbón (1°05'24.4"N, 78°59'32.4"W) ECU28261. (E, W).

176. *Culex* (*Microculex*) *chryselatus* Dyar & Knab, 1919.

Distribution. Orellana: Yasuní National Park, Tiputini Biodiversity Station, Tower (00°38'17"S, 076°08'42"W) (Linton et al. 2013; GBIF-Secretariat 2025). INSPI collection—Esmeraldas: Alto Tambo (0°55'49.00"N, 78°32'37.00"W) (Navarro et al. 2015). (E, W).

177. *Culex* (*Microculex*) *imitator* Theobald, 1903.

Synonyms. *Cx. daumasturus* Dyar & Knab, 1906; *Cx. vector* Dyar & Knab, 1906; *Microculex argenteoumbrosus* Theobald, 1907.

Distribution. Guayas; Los Ríos; Napo, Pastaza, and Orellana (formerly Napo-Pastaza); Morona Santiago and Zamora Chinchipe (formerly Santiago-Zamora) (Levi-Castillo 1949b, 1953d); Ecuador (Levi-Castillo 1958; Stone et al. 1959; Bánki et al. 2025). (E, W).

178. *Culex* (*Microculex*) *neglectus* Lutz, 1904.

Distribution. Esmeraldas: Alto Tambo (0°55'49.00"N, 78°32'37.00"W) (Navarro et al. 2015). (W).

179. *Culex* (*Microculex*) *pleuristriatus* Theobald, 1903.

Distribution. Orellana: Yasuní National Park, Tiputini Biodiversity Station, Tower (0°38'17.0"S, 76°08'42.0"W); Main Camp (0°38'13.5"S, 76°09'00.3"W) (Linton et al. 2013). (E).

180. *Culex* (*Microculex*) *stonei* Lane & Whitman, 1943.

Distribution. Orellana: Yasuní National Park, Tiputini Biodiversity Station, Tower (0°38'17.0"S, 76°08'42.0"W) (Linton et al. 2013). (E).

181. *Culex* (*Phenacomyia*) *corniger* Theobald, 1903.

Synonyms. *Cx. basilicus* Dyar & Knab, 1906; *Cx. hassardii* Grabham, 1906; *Cx. loquaculus* Dyar & Knab, 1909; *Cx. rigidus* Senevet & Abonnenc, 1939; *Cx. subfuscus* Theobald, 1907.

Distribution. Orellana (formerly Napo), ~ 50 km E of El Coca, "Isla Pompeya" (island in Napo River at confluence with Jivino River) (00°26'12"S, 076°37'07.5"W); Esmeraldas: Burrera Island (0°55'00.0"N, 79°39'11.0"W) (GBIF-Secretariat 2025); Sucumbíos (formerly Napo), Cuyabeno, ~ 50 km W of "Tarapoa, Campsite 800–1000 m south of the trail", 300 m a.s.l. (Heinemann and Belkin 1979); Imbabura: Lita (0°52'11.8"N, 78°27'05.6"W); Esmeraldas: San Francisco de Bogotá (01°09'21.98"N, 78°40'17.98"W); Esmeraldas: Durango (1°00'40.87"N, 78°36'03.85"W); Carchi: El Baboso (0°53'47.05"N, 78°26'34.98"W) (Navarro et al. 2015). INSPI collection—Manabí: Pacoche ECU12433; Esmeraldas: Esmeraldas ECU6112. (E, W).

182. *Culex maculatus* Belkin 1968†. Nomen dubium

Distribution. Type locality: Los Ríos, Babahoyo (1°48'10.1"S, 79°31'51.6"W) (Stone et al. 1959; Belkin 1968). (W).

183. *Culex ocellatus* Theobald, 1903. Uncertain subgenus.

Synonyms. *Cx. automartus* Root, 1927.
Distribution. Guayas: Samborondón (GBIF-Secretariat 2025). (W).

184. *Deinocerites pseudes* Dyar & Knab, 1909.

Distribution. Guayas: Playas, 7 km SE of Playas on road to Posorja (2°40'52.0"S, 80°21'16.2"W) (Heinemann and Belkin 1979; GBIF-Secretariat 2025). INSPI collection—Esmeraldas: Rioverde (1°03'03.9"N, 79°24'29.8"W) ECU8451. (W).

185. *Galindomyia leei* Stone & Barreto, 1969.

Distribution. Manabí: Bahía de Caráquez (0°37'47.9"S, 80°25'28.3"W) (Adames and Arzube 1975). (W).

186. *Lutzia* (*Lutzia*) *allostigma* (Howard, Dyar & Knab, 1915).

Distribution. Orellana: Yasuní National Park, Tiputini Biodiversity Station, near Lake (0°38'13.5"S, 76°09'00.3"W); Lago Trail, 1,500 m a.s.l. (0°38'14.98"S, 76°9'37.53"W); Main Camp (0°38'13.52"S, 76°9'0.33"W); near Main Camp (022'15.14"S, 76°9'0.32"W) (Linton et al. 2013). INSPI collection—Morona Santiago: Macas (2°28'08.6"S, 78°10'16.6"W) ECU16518; Sucumbíos: General Farfán (0°38'13.52"S, 76°9'0.33"W) ECU7310. (E).

187. *Lutzia* (*Lutzia*) *bigoti* Bellardi, 1862.

Distribution. Ecuador (Levi-Castillo 1958).

Tribe Mansoniini (11 species)

188. *Coquillettidia* (*Rhynchotaenia*) *albicosta* Peryassú, 1908.

Synonym. *Taeniorhynchus albicosta* Peryassú, 1908.
Distribution. Sucumbíos: Shushufindi, La Unión neighborhood (00°09'28.72"S, 76°38’ 53.05"W) ECU10696. (NR, E).

189. *Coquillettidia* (*Rhynchotaenia*) *arribalzagae* (Theobald, 1903).

Synonyms. *Taeniorhynchus arribalzagae* Theobald, 1903; *Taeniorhynchus coticula* Dyar & Knab, 1907.
Distribution. Orellana (formerly Napo): Coca, confluence of Coca and Napo rivers, 250 m a.s.l. (0°28'00.0"S, 76°58'00.0"W); Orellana (formerly Napo): Coca,

~ 50 km E of "Isla Pompeya" (island in Napo River at confluence with Jivino River) (0°26'12.0"S, 76°37'07.5"W) (Heinemann and Belkin 1979; GBIF-Secretariat 2025). (E).

190. *Coquillettidia* (*Rhynchotaenia*) *fasciolata* (Lynch Arribálzaga, 1891).

Synonym. *Taeniorhynchus fasciolata* Lynch Arribalzaga, 1891.

Distribution. Orellana (formerly Napo): Coca, confluence of Coca and Napo rivers, 250 m a.s.l. (0°28'00.0"S, 76°58'00.0"W); ~ 50 km E of El Coca, "Isla Pompeya" (island in Napo River at confluence with Jivino River) (0°26'12.0"S, 76°37'07.5"W) (GBIF-Secretariat 2025); Sucumbíos (formerly Napo): Cuyabeno, 50 km of "Tarapoa, Campsite 800–1000 m south of the trail" (Heinemann and Belkin 1979). (E).

191. *Coquillettidia* (*Rhynchotaenia*) *lynchi* (Shannon, 1931).

Synonym. *Ma. lynchi* Shannon, 1931.

Distribution. Orellana (formerly Napo): Coca, confluence of Coca and Napo rivers, 250 m a.s.l. (0°28'00.0"S, 76°58'00.0"W); Orellana (formerly Napo), ~ 50 km E of El Coca, "Isla Pompeya" (island in Napo River at confluence with Jivino River) (0°26'12.0"S, 76°37'07.5"W) (Heinemann and Belkin 1979; GBIF-Secretariat 2025). INSPI collection—Zamora Chinchipe: Zamora ECU8051; Esmeraldas, Eloy Alfaro, Borbón (1°05'24.4"N, 78°59'32.4"W) ECU27888. (E, W).

192. *Coquillettidia* (*Rhynchotaenia*) *nigricans* (Coquillett, 1904).

Synonyms. *Bancroftia persephassa* Dyar & Knab, 1909; *Taeniorhynchus nigricans* Coquillett, 1904.

Distribution. INSPI collection—Sucumbíos: Nueva Loja (0°04'12.3"N, 76°52'32.0"W) ECU14109; Manabí: Montecristi (1°07'25.0"S, 80°50'43.9"W) ECU11436. (E).

193. *Coquillettidia* (*Rhynchotaenia*) *venezuelensis* (Theobald, 1912).

Synonyms. *Ma. araozi* Shannon & Ponte, 1928; *Pseudotaeniorhynchus venezuelensis* Theobald, 1912.

Distribution. Pastaza: Puyo (Gutiérrez-Vera et al. 2021). INSPI collection—Esmeraldas: Borbón ECU27609. (E, W).

194. *Mansonia* (*Mansonia*) *humeralis* Dyar & Knab, 1916.

Distribution. INSPI collection—Manabí: Boca de Palmito (0°05'16.4"S, 79°43'42.0"W) ECU19100; Guayas: Guayaquil (2°16'49.3"S, 79°54'14.6"W) ECU6104. (W).

195. *Mansonia* (*Mansonia*) *indubitans* Dyar & Shannon, 1925.

Distribution. Manabí: "Bahía, Floresta" (Heinemann and Belkin 1979). (W).

196. *Mansonia* (*Mansonia*) *pseudotitillans* Theobald, 1901.

Synonym. *Panoplites pseudotitillans* Theobald, 1901.

Distribution. INSPI collection—Esmeraldas: Esmeraldas (0°57'54.0"N, 79°39'24.3"W) ECU13848. (W).

197. *Mansonia* (*Mansonia*) *titillans* (Walker, 1848).

Synonym. *Cx. titillans* Walker, 1848.

Distribution. INSPI collection—Guayas: Guayaquil (2°09'18.5"S, 79°53'09.8"W) ECU10715; Zamora: Zamora (4°07'44.6"S, 78°59'44.3"W) ECU8094; Esmeraldas: Borbón (1°05'24.4"N, 78°59'32.4"W) ECU28282. (E, W).

198. *Mansonia* (*Mansonia*) *wilsoni* (Barreto & Coutinho, 1944).

Synonym. *Taeniorhynchus wilsoni* Barreto & Coutinho, 1944.

Distribution. Orellana: Yasuní National Park, Tiputini Biodiversity Station, Maquisapa Trail, 6,300 m a.s.l. (0°37'54.9"S, 76°09'58.3"W) (Linton et al. 2013). INSPI collection—Los Ríos: Baba (1°46'51.7"S, 79°40'25.0"W) ECU16544. (E, W).

Tribe Orthopodomyiini (3 species)

199. *Orthopodomyia albicosta* (Lutz, 1904).

Synonym. *Bancroftia albicosta* Lutz, 1904.

Distribution. INSPI collection—Morona Santiago: Macas (02°20'17.30"S, 078°9'46.63"W) ECU11574, ECU11586, ECU11590. (NR, E).

200. *Orthopodomyia fascipes* (Coquillett, 1906).

Synonyms. *Mansonia bacigalupoi* Martinez & Prosen, 1958; *Ma. fascipes* Coquillett, 1906; *Ma. longipalpis* Newstead & Thomas, 1910; *Ma. townsendi* Lima, 1935.

Distribution. Orellana: Yasuní National Park, Tiputini Biodiversity Station, Canopy walkway (0°38'14.9"S, 76°08'36.7"W); Maquisapa Trail, 6,200 m a.s.l. (00°37'54.9"S, 076°09'58.4"W) (Linton et al. 2013); Orellana (formerly Napo): Coca, confluence of Coca and Napo rivers, 250 m a.s.l. (0°28'00.0"S, 76°58'00.0"W) (Heinemann and Belkin 1979; GBIF-Secretariat 2025). (E).

201. *Orthopodomyia phyllozoa* (Dyar & Knab, 1907).

Synonym. *Ma. phyllozoa* Dyar & Knab, 1907.

Distribution. Sto. Domingo de los Tsáchilas (formerly part of Pichincha): Reserva La Perla (00°01'03"S, 079°23'47"W) (GBIF-Secretariat 2025). INSPI collection—Sucumbíos: Nueva Loja (0°06'04.2"N, 76°52'47.8"W) ECU14118. (E, W).

Tribe Sabethini (52 species)

202. *Johnbelkinia longipes* (Fabricius, 1805).

Synonym. *Cx. longipes* Fabricius, 1805.

Distribution. Orellana (formerly Napo): Coca, confluence of Coca and Napo rivers, 250 m a.s.l. (0°28'00.0"S, 76°58'00.0"W); Orellana (formerly Napo), ~ 50 km E of El Coca, "Isla Pompeya" (island in Napo River at confluence with Jivino River) (0°26'12.0"S, 76°37'07.5"W) (Heinemann and Belkin 1979; Zavortink 1979; GBIF-Secretariat 2025). INSPI collection—Sucumbíos: Shushufindi (0°04'55.6"S, 76°38'37.0"W) ECU13365; Napo: Tena (1°01'50.0"S, 77°34'41.0"W) ECU7357. (E).

203. *Johnbelkinia ulopus* (Dyar & Knab, 1906).

Synonym. *Lesticocampa culicivora* Dyar & Knab, 1907.

Distribution. Cañar: Cochancay, km 86 on Rt. 8 from Guayaquil (2°28'08.4"S, 79°17'50.6"W) (Heinemann and Belkin 1979; GBIF-Secretariat 2025); Manabí: Pacoche Lodge, "La Bomba" sector (1°04'04.6"S, 80°52'44.8"W); Los Ríos: Pichilingue (GBIF-Secretariat 2025); Bolívar: Balzapamba; Cañar: Cochancay, at km 86 on Rt. 8 (Zavortink 1979). INSPI collection—Sto. Domingo de los Tsáchilas: Santo Domingo (0°22'47.2"S, 79°16'41.8"W) ECU20402; Pichincha: Mindo (0°02'55.4"S, 78°46'30.7"W) ECU10267. (W).

204. *Limatus andinus* Levi-Castillo, 1954†.**

Distribution. Type locality: Los Ríos: Valencia (0°57'14.8"S, 79°21'10.3"W) (Stone et al. 1959); Ecuador (Levi-Castillo 1958; AFPMB 1998; Bánki et al. 2025). (W).

205. *Limatus asulleptus* (Theobald, 1903).

Synonyms. *Li. methysticus* Dyar & Knab, 1909; *Dendromyia asulleptus* Theobald, 1903.

Distribution. Orellana (formerly Napo): Coca, confluence of Coca and Napo rivers, 250 m a.s.l. (0°28'00.0"S, 76°58'00.0"W), ~ 50 km E of El Coca, "Isla Pompeya" (island in Napo River at confluence with Jivino River) (00°26'12"S, 076°37'07.5"W); Los Ríos: Quevedo, 1 km E of Valencia (00°57'14.8"S, 079°21'10.3"W) (Heinemann and Belkin 1979; GBIF-Secretariat 2025). INSPI collection—Esmeraldas: San Lorenzo, San Francisco (1°17'18.0"N, 78°50'13.0"W) ECU3768; Imbabura: Lita (0°52'15.8"N, 78°27'06.6"W) ECU19850. (E, W).

206. *Limatus durhamii* Theobald, 1901.

Synonyms. *Dendromyia paraensis* Theobald, 1903; *Li. cacophrades* Dyar & Knab, 1909; *Li. exhibitor* Shannon & Ponte, 1927; *Simondella curvirostris* Laveran, 1902.

Distribution. Orellana (formerly Napo): Coca, confluence of Coca and Napo rivers, 250 m a.s.l. (0°28'00.0"S, 76°58'00.0"W); Orellana (formerly Napo), ~ 50 km E of El Coca, "Isla Pompeya" (island in Napo River at confluence with Jivino River)

(00°26'12"S, 076°37'07.5"W); Los Ríos: Quevedo, 1 km E of Valencia, 200 m a.s.l.; Los Ríos: Quevedo, ~ 10 km SW of Pichilingue (01°06'11.9"S, 079°29'7.8"W); Los Ríos: Babahoyo, ~ 30 km E of Montalvo (01°49'11.9"S, 079°31'7.8"W); Sucumbíos (formerly Napo): Cuyabeno, ~ 50 km W of "Tarapoa, Campsite 5.5 km N", 300 m a.s.l. (Heinemann and Belkin 1979; GBIF-Secretariat 2025); Orellana: Yasuní National Park, Tiputini Biodiversity Station, Lago Trail, 1,700 m a.s.l. (0°38'14.12"S, 76°9'43.74"W); Main Camp (0°38'13.52"S, 76°9'0.33"W); Lago Trail, 1,400 m a.s.l. (0°38'14.94"S, 76°9'34.46"W) (Linton et al. 2013); Imbabura: Lita (0°52'11.83"N, 78°27'05.56"W); Cachaco (0°49'41.19"N, 78°24'03.55"W). INSPI collection—Chimborazo, Cumandá ECU204; Morona Santiago: Yantzaza (3°48'46.6"S, 78°45'30.1"W) ECU6142; Sto. Domingo de los Tsáchilas: Santo Domingo (0°15'40.6"S, 79°11'45.4"W) ECU10224; Pichincha: Mindo (0°02'21.9"S, 78°46'07.2"W) ECU9999; Zamora Chinchipe: Zamora (4°05'15.7"S, 78°57'27.3"W) ECU10932; Esmeraldas: Borbón (11°05'22.0"N, 78°59'30.8"W) ECU28830. (E, W).

207. *Limatus flavisetosus* de Oliveira Castro, 1935.

Distribution. Orellana: Yasuní National Park, Tiputini Biodiversity Station (00°38'13.51"S, 76°09'0.31"W), Lago Trail, 2,000 m a.s.l. (0°38'15.54"S, 76°9'51.82"W); Lago Trail, 1,700 m a.s.l. (0°38'14.13"S, 76°9'43.83"W); Main Camp (0°38'13.52"S, 76°9'0.33"W); Harpía Trail, 750 m a.s.l. (00°37'50.2"S, 076°08'43.4"W); Maquisapa Trail, 6,200 m a.s.l. (00°37'54.9"S, 076°09'58.4"W) (Linton et al. 2013). INSPI collection—Sto. Domingo de los Tsáchilas: La Concordia (0°00'35.5"N, 79°22'60.0"W) ECU3288; Zamora Chinchipe: Copalinga (4°05'10.9"S, 78°57'25.2"W) ECU10938; Esmeraldas: Borbón ECU27567. (E, W).

208. *Limatus guayasi* Levi-Castillo, 1954 **†.

Distribution. Type locality: Guayas: El Empalme (Levi-Castillo 1954; Stone et al. 1959; GBIF-Secretariat 2025); Ecuador (Levi-Castillo 1958; AFPMB 1998; Bánki et al. 2025) (W).

209. *Onirion imparis* Peyton & Harbach, 2000.

Distribution. Orellana (formerly Napo): Coca, confluence of Coca and Napo rivers (Harbach and Peyton 2000); Orellana: Tiputini Biodiversity Station, Maquisapa Trail (00°37'54.9"S, 076°09'58.4"W), Tiputini River, 6 km from Tiputini Biodiversity Station (0°39'50.00"S, 76°12'56.01"W) (Linton et al. 2013). INSPI collection—Orellana: Loreto (0°31'08.0"S, 77°25'40.4"W) ECU10705. (E).

210. *Runchomyia* (*Ctenogoeldia*) *magna* (Theobald, 1905).

Synonym. *Phoniomyia magnum* Theobald, 1905.

Distribution. Cañar: Cochancay, at km 86 on Rt. 8 from Guayaquil (02°28'08.4"S, 079°17'50.6"W); Los Ríos: Quevedo, ~ 30 km SW of Quevedo, 3 km S of El Empalme (01°06'12.0"S, 079°41'07.9"W) (Heinemann and Belkin 1979; GBIF-Secretariat 2025); Orellana: Yasuní National Park, Tiputini Biodiversity Station, near Tiputini River, ~ 8 km from Tiputini Biodiversity Station (0°39'53.00"S, 76°12'54.00"W) (Linton et al. 2013). (E, W).

211. *Sabethes* (*Peytonulus*) *identicus* Dyar & Knab, 1907.

Synonym. *Sa. lutzianus* Lane & Cerqueira, 1942.

Distribution. INSPI collection—Manabí: Manta (1°04'06.7"S, 80°53'13.3"W) ECU10638. Manabí: San Lorenzo (1°07'35.7"S, 80°50'41.3"W) ECU10619. (W).

212. *Sabethes* (*Peytonulus*) *luxodens* Hall, Howard & Harbach, 1999†.

Distribution. Type locality: Guayas: Guayaquil, 12 km W of Guayaquil on Rt. 3 (2°11'20.73"S, 79°59'1.73"W) (Hall et al. 1999); Orellana: Yasuní National Park, Tiputini Biodiversity Station, near Tiputini River, ~ 8 km from Tiputini Biodiversity Station (0°39'53.00"S, 76°12'54.00"W) (Linton et al. 2013). (E).

213. *Sabethes* (*Petyonulus*) *soperi* Lane & Cerqueira, 1942.

Distribution. Napo: National Reserve Colonso-Chalupas (0°56'09.8"S, 77°54'12.3"W) (Navarro et al. 2015). (E).

214. *Sabethes* (*Peytonulus*) *undosus* (Coquillett, 1906).

Synonym. *Sa. undosus* Coquillett, 1906.

Distribution. Guayas: Guayaquil, at km 12 on Rt. 3, ~ 0.9 km W of checkpoint (02°11'32.6"S, 079°59'09.7"W) (Heinemann and Belkin 1979; GBIF-Secretariat 2025). (W).

215. *Sabethes* (*Sabethes*) *albiprivus* Theobald, 1903.

Synonyms. *Sa. albiprivatus* Lutz, 1904; *Sa. albiprivatus* Theobald, 1907; *Sa. neivai* Petrocchi, 1927.

Distribution. INSPI collection—Chimborazo: Cumandá (2°12'18.09"S, 79°8'9.56"W) ECU6283. Esmeraldas: Rioverde (1°2'31.13"N, 79°22'59.48"W) ECU7244, ECU8059; Guayas: Progreso (2°24'57.86"S. 80°21'57.32"W) ECU7154; Los Ríos: Quevedo (01°1'4.83"S, 079°27'32.71"W) ECU6094; Manabí: Chone, San Andrés (0°41'17.7"S, 80°05'48.4"W) ECU6121; Manabí: Cantón Junín ECU6441; Sto. Domingo de los Tsáchilas: Sueño de Bolívar (0°13'16.00"S, 79°9'54.18"W) ECU10100. (NR, W).

216. *Sabethes* (*Sabethes*) *amazonicus* Gordon & Evans, 1922.

Synonyms. *Sa. kappleri* Bonne, 1923; *Sa. longfieldae* Edwards, 1928.

Distribution. INSPI collection—Zamora Chinchipe: Zamora, Copalinga (4°05'14.4"S, 78°57'22.8"W) ECU10694. (E).

217. *Sabethes* (*Sabethes*) *belisarioi* Neiva, 1908.

Synonyms. *Sa. argyronotum* Edwards, 1928; *Sa. goeldii* Howard, Dyar & Knab, 1917; *Sa. schausi* Dyar & Knab, 1908; *Sebethes bellisarioi* Neiva, 1908.

Distribution. INSPI collection—Zamora Chinchipe: Copalinga (4°05'13.2"S, 78°57'24.6"W) ECU10718; Sucumbíos: Shushufindi (0°11'01.5"S, 76°39'22.6"W) ECU16528. Sucumbíos: Pacayacu (0°02'09.9"S, 76°35'41.8"W) ECU13405. (NR, E).

218. *Sabethes* (*Sabethes*) *bipartipes* Dyar & Knab, 1906.

Synonym. *Sa. chroiopus* Dyar & Knab, 1913.

Distribution. Los Ríos: Quevedo, 1 km E of Valencia (00°56"46.9"S, 079°20'10.5"W); Los Ríos: Quevedo, ~ 10 km SW of Pichilingue; Guayas: Guayaquil, 14 km W of Guayaquil on Rt. 3 (2°10'48.21"S, 80°0'6.49"W), 12 km W of Guayaquil on Rt. 3 (2°11'20.73"S, 79°59'1.73"W) (Heinemann and Belkin 1979; GBIF-Secretariat 2025). (W).

219. *Sabethes* (*Sabethes*) *cyaneus* (Fabricius, 1805).

Synonyms. *Cx. cyaneus* Fabricius, 1805; *Cx. remipes* Wiedemann, 1828; *Sa. locuples* Robineau-Desvoidy, 1827.

Distribution. INSPI collection—Sucumbíos: Nueva Loja (0°09'53.7"N, 76°40'43.0"W) ECU18477; Esmeraldas: Alto Tambo (0°58'33.3"N, 78°34'28.2"W) ECU17956. (E, W).

220. *Sabethes* (*Sabethes*) *purpureus* (Theobald, 1901).

Synonyms. *Sa. purpureus* Peryassú, 1908; *Sa. remipusculus* Dyar, 1924; *Sabethoides purpureus* Theobald, 1907.

Distribution. INSPI collection—Esmeraldas: Rioverde, road to El Alto (1°3'2.31"N, 79°25'13.67"W) ECU8528; Sucumbíos: Cuyabeno (0°13'3.41"S, 75°48'24.87"W) ECU10720. (NR, E, W).

221. *Sabethes* (*Sabethes*) *quasicyaneus* Peryassú, 1922.

Distribution. INSPI collection—Esmeraldas: San Lorenzo (1°17'18.00"N, 78°50'13.00"W) ECU3767; Esmeraldas: road to El Alto (1°2'16.30"N, 79°14'55.54"W) ECU8531; Guayas: Progreso (2°24'57.86"S, 80°21'57.32"W) ECU7158; Manabí: Junín (0°55'31.4"S, 80°12'29.7"W) ECU20172. (NR, W).

222. *Sabethes* (*Sabethes*) *intermedius* (Lutz, 1904).

Synonym. *Sbn. intermedius* Lutz, 1904.

Distribution. Napo: Biological Reserve Colonso-Chalupas (Navarro et al. 2015). (E).

223. *Sabethes* (*Sabethoides*) *chloropterus* (von Humboldt, 1819) †.

Synonyms. *Cx. chloropterus* Humboldt, 1819; *Sa. confusus* Theobald, 1901; *Sa. imperfectus* Bonne-Wepster & Bonne, 1920; *Sa. rangeli* Surcouf & Gonzales-Rincones, 1911.

Distribution. Type locality Guayas: Guayaquil River, near "Borodon" most likely refers to Samborondón (Stone et al. 1959; Belkin 1968); Los Ríos: Babahoyo,

~ 30 km E of Montalvo, “Hacienda Mora” (01°45'49.2"S, 079°14'12"W) (Heinemann and Belkin 1979; GBIF-Secretariat 2025). INSPI collection—Sucumbíos: Cuyabeno (0°12'56.3"S, 75°48'33.6"W) ECU10717. (E, W).

224. *Sabethes* (*Sabethoides*) *glaucodaemon* (Dyar & Shannon, 1925).

Synonym. *Sbo. glaucodaemon* Dyar & Shannon, 1925.

Distribution. INSPI collection—Sucumbíos: Cuyabeno (0°13'4.53"S, 75°48'33.55"W) ECU10716; Sucumbíos: Shushufindi, La Invasión (0°11'57.03"S, 76°37'31.83"W) ECU7093. (NR, E).

225. *Trichoprosopon andinum* Levi-Castillo, 1953†.

Distribution. Type locality: Cotopaxi: Macuchi, 1,500 m a.s.l. (00°59'60"S, 079°04'00"W) (Levi-Castillo 1953b; Stone et al. 1959). (A).

226. *Trichoprosopon compressum* Lutz, 1905.

Synonym. *Tr. compressum* var. *Mogilasium* from Panamá. *Tr. compressum mogilasium* (Dyar & Knab, 1907).

Distribution. Los Ríos: Quevedo, 4 km W of Valencia (1°01'00.0"S, 79°21'00.0"W); Esmeraldas: Alto Tambo (0°55'49.00"N, 78°32'37.00"W) (Navarro et al. 2015); Orellana: Coca, Confluence of Coca and Napo rivers; Coca, ~ 50 km E of “Isla Pompeya” (island in Napo River at confluence with Jivino River); Manabí: Pacoche Lodge (1°03'59.00"S, 80°52'51.2"W) (GBIF Secretariat 2025). INSPI collection—Morona Santiago: Parroquia Macuma. Research Station Wisui (2°05'13.0"S, 77°45'03.4"W) ECU3516; Sucumbíos: Shushufindi (0°11'58.8"S, 76°35'22.0"W) ECU20474. (E, W).

227. *Trichoprosopon cotopaxense* Levi-Castillo, 1953†.**

Note. Described as *cotopaxensis*. Changed to *cotopaxense* (Stone 1967). Nomen dubium, possible synonyms *Tr. digitatum* and *Johnbelkinia ulopus* (Zavortink 1979). Provisionally accepted name (Bánki et al. 2025). Subgenus nomina dubia (Zavortink 1979).

Distribution. Type locality: Cotopaxi: Macuchi (00°59'10.2"S, 079°04'00"W) (Levi-Castillo 1953b; Stone et al. 1959). Ecuador (Levi-Castillo 1958). (A).

228. *Trichoprosopon evansae* Antunes, 1942.

Distribution. Napo, Orellana, and Pastaza (formerly Napo-Pastaza) (Levi-Castillo 1953c). Ecuador (Levi-Castillo 1958). (E).

229. *Trichoprosopon digitatum* (Rondani, 1848).

Synonyms. *Cx. digitatus* Rondani, 1848; *Joblotia subsplendens* Martini, 1931; *Tr. nivipes* Theobald, 1901; *Tr. splendens* Lutz, 1904; *Tr. wilsoni* Ludlow, 1918.

Distribution. Sto. Domingo de los Tsáchilas (formerly Pichincha): Valle Hermoso; Orellana (formerly Napo), ~ 50 km E of El Coca, “Isla Pompeya” (island

in Napo River at confluence with Jivino River) (00°26'12"S, 076°37'07.5"W); (GBIF-Secretariat 2025); Napo: Coca, confluence of Coca and Napo rivers, 250 m a.s.l.; Los Ríos: Quevedo, 1 km E of Valencia, 200 m a.s.l. (01°00'00"S, 076°00'00"W); Los Ríos: Quevedo, 4 km W of Valencia, 200 m a.s.l. (1°01'00.0"S, 79°21'00.0"W); Los Ríos: Quevedo, ~ 30 km SW of Quevedo, 3 km S of El Empalme, 100 m a.s.l.; Los Ríos: Babahoyo, ~ 30 km E of Montalvo, 100 m a.s.l. (1°48'00.0"S, 79°20'00.0"W); Los Ríos: Babahoyo, ~ 30 km E of Montalvo, "Hacienda Mora", 100 m a.s.l. across river at end of main path of Montalvo (01°49'11.9"S, 079°31'07.8"W); Sucumbíos (formerly Napo): Cuyabeno, ~ 50 km W of "Tarapoa, Campsite 5.5 km N" (0°10'00.0"S, 76°20'00.0"W) (Heinemann and Belkin 1979); Orellana: Yasuní National Park, Tiputini Biodiversity Station, Lago Trail, 2,200 m a.s.l. (0°38'9.80"S, 76°9'51"W); Lago Trail, 2,000 m a.s.l. (0°38'15.54"S, 76°9'51.82"W); Harpía Trail, 800 m a.s.l. (0°37'48.64"S, 76°8'43.81"W); Tower (0°39'52.99"S, 76°12'54.00"W); Numa Trail (0°38'15.50"S, 76°8'59.31"W); Main Camp (0°38'13.52"S, 76°9'0.33"W) (00°38'17"S, 076°09'22.2"W); Main Camp at Chorongo Trail (0°38'10.87"S, 76°8'55.40"W); Lago Trail 975 m (0°38'17.01"S, 76°9'22.21"W); Lago Trail 1400 m (0°38'14.94"S, 76°9'34.46"W); near Main Camp (022'15.14"S, 76°9'0.32"W) (Linton et al. 2013). INSPI collection—Morona Santiago: Macuma, Research Station Wisui (2°05'13.0"S, 77°45'03.4"W) ECU3517; Sucumbíos: Shushufindi (0°10'19.3"S, 76°38'08.0"W) ECU14842; Chimborazo: Cumandá (2°12'18.1"S, 79°08'10.0"W) ECU20208. (E, W).

230. *Trichoprosopon lampropus* (Howard, Dyar & Knab, 1913).

Synonym. *Lesticocampa lampropus* Howard, Dyar & Knab, 1913.

Distribution. Orellana: Yasuní National Park, Tiputini Biodiversity Station, Lago Trail, 975 m a.s.l. (0°38'17.01"S, 76°9'22.21"W) (Linton et al. 2013). (E).

231. *Trichoprosopon lanei* (Antunes, 1937).

Synonym. *Goeldia lanei* Antunes, 1937.

Distribution. Orellana (formerly Napo): ~ 50 km E of El Coca, "Isla Pompeya" (island in Napo River at confluence with Jivino River) (00°26'12"S, 076°37'07.5"W); Orellana (formerly Napo): Coca, confluence of Coca and Napo rivers, 250 m a.s.l. (0°28'00.0"S, 76°58'00.0"W) (Heinemann and Belkin 1979; GBIF-Secretariat 2025). (E).

232. *Trichoprosopon pallidiventer* (Lutz, 1905).

Synonym. *Hyloconops pallidiventer* Lutz, 1905.

Distribution. Orellana (formerly Napo), Coca, ~ 50 km E of "Isla Pompeya" (island in Napo River at confluence with Jivino River) (0°26'00.0"S, 76°37'00.0"W) (Heinemann and Belkin 1979). INSPI collection—Imbabura: Cachaco; Esmeraldas: San Francisco de Bogotá; Pichincha: Nanegalito (0°04'00.0"N, 78°39'60.0"W) ECU3257. (E, W).

233. *Trichoprosopon vonplesseni* (Dyar & Knab, 1906) †.

Synonym. *Lesticocampa vonplesseni* Dyar & Knab, 1906.

Distribution. Type locality: Upper Pastaza River (Napo-Pastaza) (Lane 1953; Belkin et al. 1965a; Heinemann and Belkin 1979). INSPI collection—Sucumbíos: Shushufindi (0°11'03.1"S, 76°37'59.5"W) ECU14745; Morona Santiago: Río Blanco (2°20'17.3"S, 78°09'46.6"W) ECU11583. (E).

234. *Wyeomyia* (*Decamyia*) *pseudopecten* Dyar & Knab, 1906.

Synonyms. *Den. bicompressa* Lutz, 1928; *Wy. cara* Dyar & Knab, 1909; *Wy. eloisa* Howard, Dyar & Knab, 1912; *Wy. galoa* Dyar & Knab, 1906.

Distribution. Orellana (formerly Napo): Coca, confluence of Coca and Napo rivers (0°28'00.0"S, 76°58'00.0"W); ~ 50 km of "Isla Pompeya" (island in Napo River at confluence with Jivino River) (0°26'00.0"S, 76°3700.0"W) (Heinemann and Belkin 1979; GBIF-Secretariat 2025); Orellana: Yasuní National Park, Tiputini Biodiversity Station, Main Camp (0°38'13.52'S 76°9'0.33"W) (0°38'8.99"S, 76°9'34.96"W) (Linton et al. 2013). (E).

235. *Wyeomyia* (*Decamyia*) *ulocoma* (Theobald, 1903).

Synonyms. *Den. ulocoma* Theobald, 1903; *Wy. cacodela* Dyar & Knab, 1909; *Wy. oindus* Dyar & Knab, 1909; *Wy. pantoia* Dyar & Knab, 1909.

Distribution. Orellana: Yasuní National Park, Tiputini Biodiversity Station, Main Camp (0°38'13.52"S, 76°9'0.33"W); Matapalo Trail, 450 m a.s.l. (0°38'15.11"S, 76°8'50.43"W) (Linton et al. 2013). (E).

236. *Wyeomyia* (*Dendromyia*) *complosa* (Dyar, 1928).

Synonym. *Den. complosa* Dyar, 1928.

Distribution. Los Ríos: Quevedo, Valencia, 1 km E of Valencia (00°56'47"S, 079°20'10.5"W); Los Ríos: Quevedo, 1 km E of Valencia (01°01'S 79°21'W), Quevedo, ~ 10 km SW of Pichilingue (1°0600.0"S, 79°29'00.0"W); Cañar: Cochancay, 86 km E of Guayaquil on Rt. 8 (02°28'08.4"S, 079°17'50.6"W) (Heinemann and Belkin 1979; GBIF-Secretariat 2025); Pichincha: San Miguel de los Bancos (0°01'25.37"N, 78°53'42.74"W) (Navarro et al. 2013b). (W).

237. *Wyeomyia* (*Dodecamyia*) *aphobema* Dyar, 1918.

Synonyms. *Wy. aequatorialis* Levi-Castillo, 1952; *Wy. bodkini* Edwards, 1922.

Distribution. Orellana (formerly Napo): Coca, confluence of Coca and Napo rivers, 250 m a.s.l. (0°28'00.0"S, 76°58'00.0"W) (Heinemann and Belkin 1979); Orellana: Yasuní National Park, Tiputini Biodiversity Station, Main Camp (0°38'13.52"S, 76°9'0.33"W); Guacamayo Trail, 2,300 m a.s.l. (0°38'2.42"S, 76°9'49.87"W); Chorongo Trail, 375 m a.s.l. (Linton et al. 2013). (E).

238. *Wyeomyia* (*Hystatomyia*) *esmeraldasi* (Levi-Castillo, 1955) **†. Described as *Phoniomyia esmeraldasi* by Levi-Castillo (1955).

Distribution. Type locality: Esmeraldas: Island of Changuaral, Sardinas Bight (01°23'57.2"N, 078°52'34.3"W) (Levi-Castillo 1955b; Stone et al. 1959); Ecuador (Levi-Castillo 1958; AFPMB 1998; Bánki et al. 2025). (W).

239. *Wyeomyia* (*Hystatomyia*) *lamellata* (Bonne-Wepster & Bonne, 1919).

Synonym. *Histatomyia lamellata* Bonne-Wepster & Bonne, 1919.

Distribution. Orellana: Yasuní National Park, Tiputini Biodiversity Station, Main Camp (00°38'17"S, 076°08'42"W) (Linton et al. 2013). (E).

240. *Wyeomyia* (*Miamyia*) *codiocampa* Dyar & Knab, 1907.

Distribution. Orellana: Yasuní National Park, Tiputini Biodiversity Station, near Tiputini River, ~ 8 km from Tiputini Biodiversity Station (0°39'53.00"S, 76°12'54.00"W); Maquisapa Trail, 6,200 m a.s.l. (00°37'54.9"S, 076°09'58.4"W) (Linton et al. 2013). (E).

241. *Wyeomyia* (*Miamyia*) *oblita* (Lutz, 1904).

Synonyms. *Dendromyia oblita* Lutz, 1904; *Miamyia pintoi* Lima, 1930; *Wy. fallax* Bonne-Wepster & Bonne, 1919.

Distribution. Orellana: Yasuní National Park, Tiputini Biodiversity Station, near Tiputini River, ~ 8 km from Tiputini Biodiversity Station (0°39'53.00"S, 76°12'54.00"W); Maquisapa Trail, 6,200 m a.s.l. (00°37'54.9"S, 076°09'58.4"W) (Linton et al. 2013); Orellana: Yasuní National Park, at river tip ~ 8 km from Tiputini (00°39'53"S, 076°12'54"W) (GBIF-Secretariat 2025). (E).

242. *Wyeomyia* (*Nunezia*) *bicornis* (Root, 1928).

Synonym. *Dendromyia bicornis* Root, 1928.

Distribution. Imbabura: Lita (0°52'11.8"N, 78°27'05.6"W) (Navarro et al. 2015) (W).

243. *Wyeomyia* (*Phoniomyia*) *lassalli* (Bonne-Wepster & Bonne, 1921).

Synonym. *Dyarina lassalli* Bonne-Wepster & Bonne, 1921.

Distribution. Napo, Orellana, and Pastaza (formerly Napo-Pastaza) (Levi-Castillo 1953c). Ecuador (Levi-Castillo 1958). (E).

244. *Wyeomyia* (*Phoniomyia*) *splendida* Bonne-Wepster & Bonne, 1919.

Distribution. Manabí; Esmeraldas; Napo, Orellana, and Pastaza (formerly Napo-Pastaza) (Levi-Castillo 1953c); Ecuador (Levi-Castillo 1958). (E, W).

245. *Wyeomyia albosquamata* Bonne-Wepster & Bonne, 1919.

Distribution. Orellana: Yasuní National Park, Tiputini Biodiversity Station, Main Camp (00°38'17"S, 076°08'42"W); Guacamayo Trail, 2300 m a.s.l. (0°38'2.42"S, 76°9'49.87"W) (Linton et al. 2013). (W).

246. *Wyeomyia amazonica* Levi-Castillo, 1954†. Uncertain subgenus.**

Distribution. Type locality Napo: Tena (00°59'48"S, 077°48'49.2"W); Pastaza (Levi-Castillo 1954; Stone et al. 1959); Ecuador (Levi-Castillo 1958; Bánki et al. 2025). (E).

247. *Wyeomyia aphobema* var. *aequatorialis* Levi-Castillo, 1952 **†. Uncertain subgenus.

Distribution. Type locality: Los Ríos: "Hacienda Pichilingue" (01°06'11.9"S, 079°29'7.8"W) (Levi-Castillo 1952b, 1953f; Stone et al. 1959); Ecuador (Levi-Castillo 1958; AFPMB 1998; Bánki et al. 2025). (W).

248. *Wyeomyia chalcocephala* Dyar & Knab, 1906.

Synonym. *Wy. luciae* Senevet & Chabelard, 1942. Uncertain subgenus.

Distribution. Los Ríos: Quevedo, 1 km E of Valencia; Guayas: Cochancay, at km 86 on Rt. 8 from Guayaquil (02°28'08.4"S, 079°17'50.6"W); Guayas: Guayaquil, 12 km W of Guayaquil on Rt 3, ~ 0.9 km W of checkpoint at km 12 on Rt. 3 (02°11'32.6"S, 079°59'09.7"W); Cañar: Cochancay, at km 86 on Rt. 8 from Guayaquil (Heinemann and Belkin 1979; GBIF-Secretariat 2025). (W).

249. *Wyeomyia melanocephala* Dyar & Knab, 1906.

Synonyms. *Dendromyia melanoides* Root, 1928; *Den. typharum* Shannon & Ponte, 1927; *Prosopolepis hemisiris* Dyar & Shannon, 1925; *Sabethes canfieldi* Dyar & Knab, 1907; *Wy. agnostips* Dyar & Knab, 1907; *Wy. fauna* Dyar & Knab, 1919; *Wy. grenadensis* Edwards, 1916; *Wy. modalma* Dyar, 1922; *Wy. pandora* Dyar & Knab, 1909. Uncertain subgenus.

Distribution. Orellana (formerly Napo): Coca, confluence of Coca and Napo rivers, 250 m a.s.l. (0°28'00.0"S, 76°58'00.0"W); Orellana (formerly Napo): ~ 50 km E of El Coca, "Isla Pompeya" (island in Napo River at confluence with Jivino River) (00°26'12"S, 076°37'07.5"W) (Heinemann and Belkin 1979; GBIF-Secretariat 2025). (E).

250. *Wyeomyia* (*Wyeomyia*) *arthrostigma* (Lutz, 1905).

Synonyms. *Dendromyia arthrostigma* Lutz, 1905; *Wy. bromeliarum* Dyar & Knab, 1906; *Wy. drapetes* Dyar & Knab, 1909; *Wy. espartana* Dyar & Knab, 1906; *Wy. panamena* Dyar & Knab, 1907.

Distribution. Orellana (formerly Napo): ~ 50 km E of El Coca, "Isla Pompeya" (island in Napo River at confluence with Jivino River) (00°26'12"S, 076°37'07.5"W) (Heinemann and Belkin 1979; GBIF-Secretariat 2025). (E).

251. *Wyeomyia* (*Wyeomyia*) *celaenocephala* Dyar & Knab, 1906.

Synonyms. *Phoniomyia chrysomus* Dyar & Knab, 1907; *Pho. philophone* Dyar & Knab, 1907; *Wy. mataea* Dyar & Knab, 1908; *Wy. megalodora* Dyar & Knab, 1908.

Distribution. Carchi: El Baboso (0°53'47.05"N, 78°26'34.98"W) (Navarro et al. 2015). (W).

252. *Wyeomyia* (*Wyeomyia*) *medioalbipes* Lutz, 1904.

Synonyms. *Wy. telestica* Dyar & Knab, 1906; *Wy. abascanta* Dyar & Knab, 1908.

Distribution. Orellana: Yasuní National Park, Tiputini Biodiversity Station, Tower (0°38'17.0"S, 76°08'42.0"W) (Linton et al. 2013). (E).

253. *Wyeomyia* (*Wyeomyia*) *scotinomus* (Dyar & Knab, 1907).

Synonyms. *Phoniomyia scotinomus* Dyar & Knab, 1907; *Wy. abrachys* Dyar & Knab, 1909; *Wy. camptocomma* Dyar, 1924; *Wy. chresta* Dyar & Knab, 1909; *Wy. hapla* Dyar & Knab, 1909; *Wy. homothe* Dyar & Knab, 1907; *Wy. incana* Dyar, 1922; *Wy. leucopisthepus* Dyar & Knab, 1907.

Distribution. Manabí; Esmeraldas; Los Ríos; Napo, Orellana, and Pastaza (formerly Napo-Pastaza) (Levi-Castillo 1953c); Ecuador (Levi-Castillo 1958). (E, W).

Tribe Toxorhynchitini (7 species)

254. *Toxorhynchites aequatorianus* Levi-Castillo, 1953. Nomen dubium (Stone et al. 1959).

Distribution. Los Ríos: Pichilingue (01°06'11.9"S, 079°29'7.8"W) (Levi-Castillo 1953e; Bánki et al. 2025). (W).

255. *Toxorhynchites haemorrhoidalis superbus* (Fabricius, 1787).

Synonym. *Megarhinus superbus* Dyar & Knab, 1906.

Distribution. Guayas: Guayaquil and its surroundings (Campos 1925); Guayas; Manabí; Los Ríos (Levi-Castillo 1953c). (W).

256. *Toxorhynchites* (*Lynchiella*) *bambusicola* Knight & Rozeboom, 1946.

Synonyms. *Megarhinus aldrichanus* Bonne-Wepster & Bonne, 1919; *Megarhinus bambusicola* Lutz & Neiva, 1913.

Distribution. Orellana: Yasuní National Park, Tiputini Biodiversity Station, Maquisapa Trail, 6,200 m a.s.l. (00°37'54.9"S, 076°09'58.4"W); Tiputini River, 6 km from Tiputini Biodiversity Station (0°39'50.00"S, 76°12'56.01"W) (Linton et al. 2013). (E).

257. *Toxorhynchites* (*Lynchiella*) *guadeloupensis* (Dyar & Knab, 1906).

Synonyms. *Megarrhina horei* Gordon & Evans, 1922; *Meg. tucumanus* Brèthes, 1926; *Meg. arborealis* Shannon & Ponte, 1927; *Meg. guianensis* Bonne-Wepster & Bonne, 1953.

Distribution. INSPI collection—Manabí: La Pila (1°6'43.28"S, 80°35'18.33"W) ECU11017. (NR, W).

258. *Toxorhynchites* (*Lynchiella*) *haemorrhoidalis* (Fabricius, 1787).

Synonym. *Cx. haemorrhoidalis* Fabricius, 1787.

Distribution. Orellana (formerly Napo): Coca, ~ 50 km E of "Isla Pompeya" (island in Napo River at confluence with Jivino River) (0°26'00"S, 76°36'60"W);

~ 50 km W of "Tarapoa (J-C Camp)"; 200 m south of the airstrip" (0°10'00"S, 76°20'00"W) (Heinemann and Belkin 1979; GBIF-Secretariat 2025); Orellana: Yasuní National Park, Tiputini Biodiversity Station, Chorongo Trail, 800 m a.s.l. (0°37'59.04"S, 76°9'2.02"W); Maquisapa Trail, 7,200 m a.s.l. (0°37'54.89"S, 76°9'58.37"W) (Linton et al. 2013). INSPI collection—Sucumbíos: Nueva Loja (0°03'49.3"N, 76°59'41.8"W) ECU16346; Sucumbíos: Shushufindi (0°11'25.8"S, 76°37'39.1"W) ECU14789. (E).

259. *Toxorhynchites* (*Lynchiella*) *hypoptes* Knab, 1907.

Distribution. Guayas: Guayaquil, 12 km W of Guayaquil on Rt. 3. (2°11'20.73"S, 79°59'1.73"W); Manabí: Portoviejo (1°03'00.0"S, 80°27'00.0"W) (Heinemann and Belkin 1979). (W).

260. *Toxorhynchites* (*Lynchiella*) *theobaldi* (Dyar & Knab, 1906).

Synonyms. *Cx. ferox* Wiedemann, 1828; *Megarhinus ambiguus* Dyar & Knab, 1906; *Megarhinus moctezuma* Dyar & Knab, 1906; *Megarhinus theobaldi* Dyar & Knab, 1906; *Megarhinus trinidadensis* Dyar & Knab, 1906; *Megarhinus wiedemanni* Dyar & Knab, 1906.

Distribution. Manabí: Portoviejo (01°03'01.4"S, 080°27'01.5"W); Guayaquil; 12 km W of Guayaquil on Rt. 3, ~ 0.9 km W of checkpoint at km 12 on Rt. 3 (GBIF-Secretariat 2025). INSPI collection—Esmeraldas: Tonsupa (0°53'10.0"N, 79°48'26.9"W) ECU11472. (W).

Tribe Uranotaeniini (6 species)

261. *Uranotaenia* (*Uranotaenia*) *calosomata* Dyar & Knab, 1907.

Synonym. *Ur. albitarsis* Gordon & Evans, 1922.

Distribution. Orellana (formerly Napo): Coca, confluence of Coca and Napo rivers, 250 m a.s.l. (0°28'00.0"S, 76°58'00.0"W) (Heinemann and Belkin 1979; GBIF-Secretariat 2025); Orellana: Yasuní National Park, Tiputini Biodiversity Station, Lake ~4 hectares (0°38'13.52"S, 76°9'0.33"W) (Linton et al. 2013). INSPI collection—Loja: Chaguarpamba (3°52'45.1"S, 79°37'35.4"W) ECU4385. (E).

262. *Uranotaenia* (*Uranotaenia*) *ditaenionota* Prado, 1931.

Synonym. *Ur. burkii* Lane, 1936.

Distribution. INSPI collection—El Oro: Marcabelí, Aguas Negras (3°47'6.10"S, 79°54'44.37"W) ECU4911. (NR, W).

263. *Uranotaenia* (*Uranotaenia*) *aequatorianna* Levi-Castillo, 1953†.**

Distribution. Type locality: Los Ríos (Levi-Castillo 1953c); Los Ríos: Babahoyo (01°48'55.5"S, 079°31'00"W) (GBIF-Secretariat 2025); Los Ríos: "Hacienda Pichilingue" (Stone et al. 1959); Ecuador (Levi-Castillo 1958; AFPMB 1998; Bánki et al. 2025). (W).

264. *Uranotaenia* (*Uranotaenia*) *geometrica* Theobald, 1901.

Distribution. Guayas: Guayaquil and its surroundings (Campos 1925); Orellana (formerly Napo), ~ 50 km E of El Coca, "Isla Pompeya" (island in Napo River at confluence with Jivino River) (00°26'12"S, 076°37'07.5"W) (Heinemann and Belkin 1979); Sto. Domingo de los Tsáchilas (formerly part of Pichincha): Valle Hermoso, near Hostería "Valle Hermoso" (00°05'06"S, 079°16'35"W); Orellana: Yasuní National Park, Tiputini Biodiversity Station (00°38'13.5"S, 076°09'0.3"W) (GBIF-Secretariat 2025). (E, W).

265. *Uranotaenia* (*Uranotaenia*) *leucoptera* (Theobald, 1907).

Synonym. *Anisocheleomyia leucoptera* Theobald, 1907.

Distribution. INSPI collection—Sucumbíos: Nueva Loja (0°06'03.0"N, 76°52'50.2"W) ECU13915. (E).

266. *Uranotaenia* (*Uranotaenia*) *lowii* Theobald, 1901.

Synonyms. *Ur. continentalis* Dyar & Knab, 1906; *Ur. minuta* Theobald, 1907; *Ur. monilis* Shannon & Ponte, 1927.

Distribution. Los Ríos: Babahoyo, 5 km W of Babahoyo, 50 m a.s.l.; Guayas: Chongón, 24 km W of Guayaquil on Rt. 3, near road to Chongón (02°13'10.5"S, 080°05'05.6"W); Guayas: Guayaquil, 10 km W of Guayaquil on Rt. 3 (02°11'32.6"S, 079°58'05"W); Esmeraldas: near Atacames (00°52'40"N, 079°49'47"W) (Heinemann and Belkin 1979; GBIF-Secretariat 2025). INSPI collection—El Oro: Huaquillas (3°29'07.4"S, 80°13'30.0"W) ECU20195. (W).

Discussion

The study of mosquitoes in Ecuador dates to 1819, when Alexander von Humboldt provided the first descriptions of local species (Belkin et al. 1965b). Later, Francisco Campos expanded the research on Ecuadorian mosquito fauna, publishing several studies on the subject. Campos primarily collected specimens from Guayaquil and coastal regions (Campos 1921, 1922, 1924, 1925). These specimens were sent to the entomologist Harrison G. Dyar, who described numerous new species from Ecuador between 1918 and 1925, some of which were named in honor of Campos (Levi-Castillo 1952a). Subsequently, Levi-Castillo made important contributions to the understanding to the country's mosquito fauna. By the 1960s, 28 Culicidae species were documented in Ecuador (Belkin et al. 1965b), of which 19 species were described by Levi-Castillo. However, most of the specimens, apparently, went missing (Zavortink 1979), and some of the material is now at the United States National Museum (USNM) (Bram 1967).

The number of species recorded in Ecuador is significant considering the country's size. By comparison, Brazil has 447 mosquito species, Mexico has approximately 244 (Ortega-Morales et al. 2023), Colombia 251 species (World Population Review 2025), and Perú 181 species (Ayala-Sulca et al. 2021). Foley et al. (2007) reported only 118 species, 23 endemic species, and 34 types for Ecuador. However, the most recent comprehensive Culicidae listing for the country identifies 179 species (Linton et al. 2013). In this study, we add 87 spe-

cies, including 17 new national records, bringing the checklist of mosquitoes of Ecuador to 266 species. These new national records correspond to species within genera and subgenera already known in the country, so no new higher-level taxa are reported. Molecular barcoding resolved 90 specimens that were difficult to identify morphologically. One specimen (*Aedes albopictus*) was readily identified by taxonomic keys, but molecular confirmation was conducted as a control. The mosquito species documented in this revision account for 7% of the global Culicidae diversity, highlighting Ecuador's substantial contribution to the overall mosquito biodiversity.

Despite this diversity, mosquito taxonomy in Ecuador remains an understudied field, with limited systematic research on the country's mosquito diversity. To address this gap, we integrate molecular identification techniques as a complement to traditional morphology-based taxonomy. This integrative approach represents an essential step toward resolving the country's understudied mosquito taxonomy and strengthening the baseline knowledge required for vector surveillance and more effective vector-borne disease control.

Species of medical importance

Species of medical importance are summarized in Suppl. material 2, which provides a comprehensive classification of mosquito species according to the type of vectorial evidence (confirmed vectors, natural infections, experimental infections, and pathogen detection only).

Subfamily Anophelinae Grassi, 1900.

There are 472 formally recognized species of *Anopheles* mosquitoes (Harbach 2013, 2025), and only a small fraction act as vectors for human diseases. In Ecuador, 42 species of this genus have been recorded. *Anopheles* mosquitoes are the primary vectors for the *Plasmodium* parasite, responsible for malaria, as well as for the O'nyong-nyong virus. Some species transmit filarial nematodes, including *Wuchereria bancrofti*, *Brugia malayi*, and *Brugia timori*. *Anopheles* mosquitoes are not typically recognized as arbovirus vectors; however, certain anthropophilic species that frequently feed on vertebrates may become exposed to circulating viruses, potentially acquiring and transmitting arboviruses (Hernandez-Valencia et al. 2023).

The species that have been reported as infected with the malaria parasites in the Americas are: *An.* (*Ano.*) *fluminensis* (Neves et al. 2013), *An.* (*Ano.*) *mattogrossensis* (Pimenta et al. 2015), *An.* (*Ano.*) *neomaculipalpus* (Moreno et al. 2005), *An.* (*Ano.*) *pseudopunctipennis* (Valderrama et al. 2021; Naranjo-Díaz and Correa 2025), *An.* (*Ano.*) *vestitipennis* (Loyola et al. 1991), *An.* (*Ker.*) *cruzii*, *An.* (*Ker.*) *homunculus* (Lorenz et al. 2012), *An.* (*Ker.*) *pholidotus* (Escovar et al. 2014, Naranjo-Díaz and Correa 2025), *An.* (*Ker.*) *neivai*, *An.* (*Ano.*) *punctimacula*, *An.* (*Ano.*) *calderoni*, *An.* (*Nys.*) *albimanus*, *An.* (*Nys.*) *nuneztovari* (Naranjo-Díaz and Correa 2025), *An.* (*Nys.*) *aquasalis* (Alencar et al. 2023), *An.* (*Nys.*) *oswaldoi*, *An.* (*Nys.*) *triannulatus* (Pimenta et al. 2015), *An.* (*Nys.*) *rangeli* (Quiñones et al. 2006), *An.* (*Nys.*) *trinkae* (Hayes et al. 1987), *An.* (*Nys.*) *benarrochi* (Pereira-Silva et al. 2022), *An.* (*Nys.*) *darlingi* (Naranjo-Díaz and Correa 2025, Pontual et al. 2025), *An.* (*Nys.*) *marajoara* (Brochero et al. 2010).

Subfamily Culicinae Meigen, 1818.

Aedeomyia (*Aedomyia*) *squamipennis* is the only species of this genus in Ecuador, with records exclusively from the western lowlands of the Andes (Levi-Castillo 1953c; Ramírez-Aguilar 1953). This species has been identified as an important vector of Gamboa virus (GAMV) and avian malaria (Burkett-Cadena and Blosser 2017), and there is evidence suggesting its role in the transmission of Venezuelan equine encephalitis virus (VEEV) (Martin et al. 2024). *Aedeomyia squamipennis* has been implicated as a carrier of 24 virus strains serologically related to the prototype GAMV in Ecuador (Calisher et al. 1981; Mitchell et al. 1985).

The genus *Aedes* has 27 species that have been recorded in Ecuador. Some *Aedes* species pose a direct threat to human health, while others have been implicated in disease transmission in wildlife or act as secondary vectors under specific ecological conditions (Das et al. 2018). *Aedes* (*Stegomyia*) *aegypti* has been recorded on both the eastern and western continental slopes of the Andes, as well as in the Galápagos Islands. This species has been recorded in locations at elevations of 1,650 meters above sea level. Renowned for its role in virus transmission, *Aedes aegypti* is a major vector of Chikungunya virus (CHIKV), Yellow Fever virus (YFV), all serotypes of Dengue virus (DENV), and Zika virus (ZIKV), significantly impacting human health (Cevallos et al. 2018; Ogunlade et al. 2021). Additionally, studies have reported midgut infections of this species with Sindbis virus (SINV) (Saredy et al. 2020). *Aedes aegypti* is also suspected to serve as vector of *Wuchereria bancrofti*, the causative agent of lymphatic filariasis (Paily et al. 2006).

Aedes albopictus was first recorded in Ecuador in 2017 in Guayaquil and has since expanded to the Amazon basin and northwestern lowlands (Ponce et al. 2018). Field studies in the Americas have detected multiple arboviruses in *Aedes* (*Stegomyia*) *albopictus*, including Eastern equine encephalitis virus (EEEV), Potosi virus (POTV), Keystone virus (KSV), Tensaw virus (TENV) (Mitchell et al. 1992), Cache Valley virus (CVV) (Mitchell et al. 1998), West Nile virus (WNV) (Rothman et al. 2021), Usutu virus (USUV) (Puggioli et al. 2017), all serotypes of DENV (Ferreira-de-Lima and Lima-Camara 2018), YFV, CHIKV and ZIKV (Grard et al. 2014), highlighting its potential to infect humans and animals (Cancrini et al. 2003). Experimental evidence confirms its competence as a vector for DENV, ZIKV, WNV, YFV, CHIKV, EEEV, VEEV, Mayaro virus (MAYV), Ross River virus (RRV), SINV, Western equine encephalitis virus (WEEV), Jamestown Canyon virus (JCV), KSV, La Crosse virus (LACV), and Rift Valley virus (RVFV) (Pereira-dos-Santos et al. 2020). Notably EEEV and KSV were the first arboviruses isolated from this species, initially detected in tire dumps in Florida (Mitchell et al. 1992). *Aedes albopictus* is also a vector of filarial parasites, reinforcing its epidemiological significance (Cancrini et al. 2003).

Aedes (*Ochlerotatus*) *taeniorhynchus* is a coastal mosquito that lives in salty marshes, capable of forming large swarms. This species is a vector of VEEV (Weaver et al. 1996; Rivas et al. 1997). In the Galápagos, this species is a competent and efficient vector of WNV. Unlike mainland populations, the Galápagos strain shows significant genetic divergence, suggesting it may be a distinct, locally adapted species with unique vector ecology (Eastwood et al. 2013).

The genus *Haemagogus* has 13 species reported in Ecuador, including *Haemagogus* (*Haemagogus*) *janthinomys* and *Haemagogus* (*Conopostegus*) *leucocelaenus*, which are key vectors of YFV in sylvatic cycles, transmitting it between non-human primates and humans (Li et al. 2022). *Haemagogus* (*Haemagogus*) *anastasionis* is considered a potential vector of YFV and MAYV (Navarro et al. 2013a).

Fourteen *Psorophora* species have been recorded in Ecuador, including *Psorophora* (*Janthinosoma*) *ferox* which is a vector of Rocio virus (ROCV) (De Souza Lopes et al. 1981) and Ilehus virus (ILHV) (Johnson et al. 2007).

The genus *Culex* has 83 species in Ecuador, which represents the 8% of the world's diversity. *Culex* (*Culex*) *quinquefasciatus* is a species with a broad distribution across the western and eastern regions of the Andean Mountain range in Ecuador. Additionally, it has been introduced into the Galápagos Islands, where it serves as a vector for avian malaria, the avian pox virus, and the WNV (Levi-Castillo 1958; Whiteman et al. 2005). Furthermore, this species is the primary agent responsible for the transmission of filariasis and has been implicated as a secondary vector of the Oropouche virus (OROV) (Consoli and Lourenço de Oliveira 1994).

Culex (*Culex*) *nigripalpus*, originally native to Brazil, has a widespread distribution in tropical and subtropical areas in North and South America. This mosquito species serves as a vector for multiple arboviruses, including Saint Louis encephalitis virus (SLEV), VEEV, EEEV, and WNV (Rutledge et al. 2003; Richards et al. 2012; De Carvalho et al. 2017).

Culex (*Melanoconion*) *iolambdis*, a mosquito species found throughout much of tropical America, is a putative vector in the transmission of VEEV (Scherer et al. 1971). The poor knowledge regarding their biology and ecology limits the current understanding of the potential importance of this mosquito species in the transmission of human pathogens (Blosser et al. 2016).

Culex (*Melanoconion*) *ocossa* has been identified as a carrier of a flavivirus in Perú (Evangelista et al. 2013) and is also associated with the VEEV (Turell et al. 1999; Weaver et al. 2004; Morrison et al. 2008).

The genus *Deinocerites* is represented in Ecuador by a single reported species, *Deinocerites pseudes*. This species has been suggested as a potential vector of VEEV and SLEV (Adames 1971).

Mosquitoes of the genus *Coquillettidia* have been identified as carriers of various pathogens, including avian malaria parasites (Njabo et al. 2009) and several arboviruses such as EEEV, WNV, SINV, MAYV, OROV, SLEV, Usutu virus (USUV), Tahyna virus (TAHV) and Batai virus (BATV) (Velásquez 2014; Lebl et al. 2015). In Ecuador, *Coquillettidia* (*Rhynchotaenia*) *albicosta* and *Coquillettidia* (*Rhynchotaenia*) *venezuelensis* have been reported. The former was identified as a carrier of Rochambeau virus (RBUV) in French Guiana in 1973 (Mahy and Van Regenmortel 2008), while the latter has been recognized as a potential vector for MAYV, OROV, and SLEV (Velásquez 2014).

In Ecuador, the genus *Mansonia* is represented by five species. However, research into their potential role as disease vectors remains scarce, despite evidence that some specimens harbor arboviruses and other pathogens. *Mansonia* (*Mansonia*) *titillans* has been identified as a carrier of VEEV (Weaver et al. 2004) and SLEV (Hoyos-López et al. 2015; Beranek et al. 2018) as well as a transporter

of *Dermatobia hominis* eggs (Hervé et al. 1986; Lourenço-de-Oliveira and Heyden 1986). Additionally, the Bunyamwera serogroup, a significant subgroup within the *Orthobunyavirus* genus (Maes et al. 2018), has been reported in *Mansonia* (*Mansonia*) *titillans* from Argentina (Beranek et al. 2018). Furthermore, avian *Plasmodium* lineages have been found in *Mansonia* (*Mansonia*) *titillans* and *Mansonia* (*Mansonia*) *pseudotitillans* from Brazil (Ferreira et al. 2016).

Mansonia (*Mansonia*) *indubitans* has demonstrated moderate susceptibility to infection by four strains of VEEV. *Plasmodium nucleophilum* and *Haemoproteus* (*Parahaemoproteus*) spp. have been detected in this species (Turell et al. 1999; Méndez et al. 2001).

The genus *Johnbelkinia* has two species in Ecuador. Among them, *Johnbelkinia ulopus* has been mentioned as a potential vector of arbovirus like Triniti virus (TNTV) (Zavortink 1979; Machado-Allison et al. 1986; Naranjo-Díaz et al. 2022).

A total of 14 species of the genus *Sabethes* have been documented in Ecuador. Among them, *Sabethes* (*Sabethoides*) *chloropterus* has been reported as a vector of YFV (De Rodaniche and Galindo 1957), SLEV and ILHV (Hervé et al. 1986; Harbach 1994). Additionally, *Sabethes* (*Sabethes*) *amazonicus* and *Sabethes* (*Sabethes*) *albiprivus* have been identified as potential vectors of YFV (Navarro et al. 2013a; Cano et al. 2021).

Conclusions

This study provides an update on the mosquito species of Ecuador, including insights into their taxonomy, distribution, and medical importance. Understanding the diversity and geographical distribution of these species is essential for vector control efforts aimed at mitigating disease transmission. However, the limited taxonomic research in Ecuador presents significant challenges for species identification and effective surveillance. The lack of standardized identification tools forces researchers to rely on external references that may not fully capture Ecuador's unique mosquito fauna, further complicated by morphological variations influenced by ecological adaptations and geographic isolation.

To address these gaps, it is important to strengthen entomological studies, develop reliable identification resources, and improve local taxonomic expertise. Enhancing mosquito surveillance and research will not only refine species classification but also contribute to better disease prevention strategies, ultimately supporting public health efforts in the region.

Acknowledgments

Special thanks to Ms. Barbara Laudan for field trips funding and to the Universidad San Francisco de Quito (USFQ) for logistical support and grant management.

Additional information

Conflict of interest

The authors have declared that no competing interests exist.

Ethical statement

No ethical statement was reported.

Use of AI

No use of AI was reported.

Funding

This study was funded by the National Institute of Allergy and Infectious Diseases, National Institute of Health, 1U01AI151788 entitled “American and Asian Centers for Arboviral Research and Enhanced Surveillance- A2CARES-CREID” and Sustainable Sciences Institute, Global Health Fund. Instituto Nacional de Investigación en Salud Pública-INSPI. SENESCYT grants PIC-12INH-002, PIC-12INH-003.

Author contributions

Patricio Ponce: conceptualization, data curation, formal analysis, investigation, writing – review & editing, project administration, resources, supervision, validation. Varsovia Cevallos: conceptualization, project administration, resources, supervision. Andrés Carrazco-Montalvo: data curation, formal analysis, investigation, methodology, validation. Jennifer Gallardo-Cóndor: data curation, formal analysis, investigation, validation, visualization, writing – original draft. Valentina Arévalo: data curation, formal analysis, investigation, methodology, validation, writing – original draft. Ximena Galarza: methodology. Josefina Coloma: writing – review & editing, resources, investigation, funding acquisition.

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Data availability

All of the data that support the findings of this study are available in the main text or Supplementary Information.

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Supplementary material 1

Geographic coordinates of new record collections

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Data type: xlsx

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Link: https://doi.org/10.3897/zookeys.1272.179156.suppl1

Supplementary material 2

Classification of mosquito species by vectorial evidence

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Data type: docx

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